

Today's approach to pricing
(Economics)

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BUSINESS WEEK

A MCGRAW-HILL PUBLICATION

TWENTY-FIVE CENTS

JUNE 15, 1957



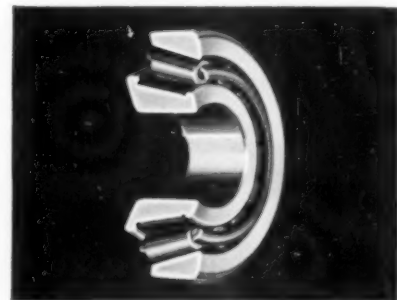
E. B. Germany of Lone Star
heads a maverick mill
serving a roughneck's business
(Companies)

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GENERAL BUSINESS

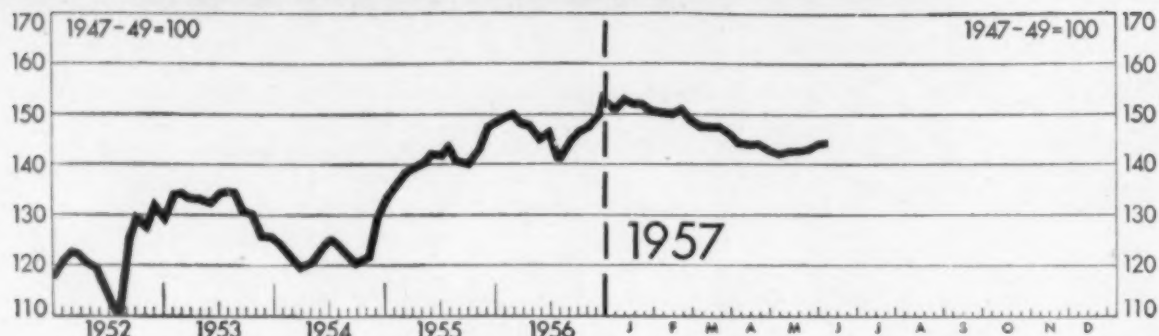
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BUSINESS WEEK INDEX (chart)

1946 Average	Year Ago	Month Ago	Week Ago	\$ Latest Week
91.6	146.7	143.3	↑144.8	145.1

PRODUCTION

Steel ingot (thous. of tons).....	1,281	2,299	2,155	↑2,240	2,257
Automobiles and trucks.....	62,880	139,165	160,101	↑110,868	161,504
Engineering const. awards (Eng. News-Rec. 4-wk daily av. in thous.).....	\$17,083	\$71,086	\$69,106	\$62,530	\$65,140
Electric power (millions of kilowatt-hours).....	4,238	10,951	11,311	10,936	11,550
Crude oil and condensate (daily av., thous. of bbls.).....	4,751	6,998	7,434	7,418	7,338
Bituminous coal (daily av., thous. of tons).....	1,745	1,555	1,595	↑1,594	1,618
Paperboard (tons).....	167,269	290,477	291,074	261,684	263,469

TRADE

Carloadings: miscellaneous and L.C.I. (daily av., thous. of cars).....	82	73	68	66	67
Carloadings: all others (daily av., thous. of cars).....	53	57	52	54	54
Department store sales index (1947-49 = 100, not seasonally adjusted).....	90	109	↑113	116	110
Business failures (Dun & Bradstreet, number).....	22	267	267	225	289

PRICES

Spot commodities, daily index (Moody's, Dec. 31, 1931 = 100).....	331.9	415.2	408.5	420.3	426.0
Industrial raw materials, daily index (BLS, 1947-49 = 100).....	↑↑73.2	93.7	92.5	93.2	93.5
Foodstuffs, daily index (BLS, 1947-49 = 100).....	↑↑75.4	81.8	81.6	83.9	84.5
Print cloth (spot and nearby, yd.).....	17.5¢	19.0¢	17.8¢	17.9¢	17.9¢
Finished steel, index (BLS, 1947-49 = 100).....	↑↑76.4	158.2	174.4	174.4	174.3
Scrap steel composite (Iron Age, ton).....	\$20.27	\$44.83	\$45.83	\$50.50	\$54.83
Copper (electrolytic, delivered price, E & M J, lb.).....	14.045¢	45.015¢	31.430¢	31.763¢	31.770¢
Wheat (No. 2, hard and dark hard winter, Kansas City, bu.).....	\$1.97	\$2.19	\$2.23	\$2.22	\$2.20
Cotton, daily price (middling, 1 in., 14 designated markets, lb.).....	**30.56¢	36.42¢	33.86¢	33.94¢	33.95¢
Wool tops (Boston, lb.).....	\$1.51	\$1.78	\$2.18	\$2.22	\$2.22

FINANCE

500 stocks composite, price index (S&P's, 1941-43 = 10).....	17.08	45.92	46.67	47.34	47.73
Medium grade corporate bond yield (Baa issues, Moody's).....	3.05%	3.75%	4.52%	4.58%	4.61%
Prime commercial paper, 4 to 6 months, N. Y. City (prevailing rate).....	¾-1%	3% %	3% %	3% %	3¾ %

BANKING (Millions of Dollars)

Demand deposits adjusted, reporting member banks.....	↑↑45,820	55,641	55,273	↑55,149	55,320
Total loans and investments, reporting member banks.....	↑↑71,916	84,726	86,087	↑86,242	86,210
Commercial and agricultural loans, reporting member banks.....	↑↑9,299	27,971	31,338	↑31,077	31,170
U. S. gov't guaranteed obligations held, reporting member banks.....	↑↑49,879	26,719	25,552	25,878	25,790
Total federal reserve credit outstanding.....	23,888	25,320	25,177	24,833	24,987

MONTHLY FIGURES OF THE WEEK

	Average	1 Year Ago	2 Months Ago	3 Months Ago
Housing starts (in thousands).....	May	55.9	113.7	92.0
Employment (in millions).....	May	55.2	65.0	64.3
Unemployment (in millions).....	May	2.3	2.9	2.7
Average weekly earnings in manufacturing.....	May	\$43.82	\$78.40	\$81.99
Wholesale prices (U. S. Dept of Labor BLS, 1947-49 = 100).....	May	78.7	114.4	117.2
Wholesalers' inventories (seasonally adjusted, in billions).....	April	\$5.5	\$12.6	\$13.1
Retailers' inventories (seasonally adjusted, in billions).....	April	\$9.8	\$23.9	\$23.7
Retail sales (seasonally adjusted, in millions).....	April	\$8,541	\$15,407	\$16,298

* Preliminary, week ended June 8, 1957.
† Revised.

†† Estimate.
** Ten designated markets, middling ½ in.

‡ Date for 'Latest Week' on each series on request.

THE PICTURES—Boeing Airplane Co.—42 (lt.); Coca-Cola Overseas—131 (bot.); Fairchild Aerial Surveys, Inc.—168 (bot.); Finnish Embassy—122; Joern Gerdts—44, 45, 46; Clyde Hare—48, 49; I. N. P.—125, 126; Herb Kretovil—70, 71, 72; Ivan Massar—Cover, 104, 105, 106, 108, 110, 112, 114, 116; J. M. Mathes, Inc.—132; Bill Mutschmann—61; Leonard Nadel—179, 181, 182; Northrop Aircraft, Inc.—42 (top), 43; Pepsi-Cola International Panorama—131 (top); Tidewater Oil Co.—168 (top), 169; W. W.—41, 52, 121.

" V I S I O N I S I N D I S P E N S A B L E T O P R O G R E S S "



Voices on the ocean floor —first telephone cable links U.S. and Europe

Ring up another resounding triumph for the communications industry—this time, the world's longest "speaking tube"—the 2,250-mile telephone cable laid under the Atlantic Ocean.

For the first time in history, your voice can speed between the continents, unaffected by the crowded radio spectrum, free from the interference of electrical storms. Two cables with a capacity of 36 simultaneous telephone conversations now stretch between North America and Europe.

Scientific research led to the development of many essential devices,

including complex amplifiers capable of operating for at least 20 years unattended on the ocean floor; casings of new polyethylene impervious to the corrosive action of sea water—striking examples of the ingenuity that wired together the telephones of two hemispheres.

The success of this venture, which cost

\$42 million, demonstrates the extraordinary energy and purpose of free men working for the common good. Continued progress in communications relies, in part, on the financial services provided by banks. Many of the ways we and our correspondent banks work with the communications industry may be of help to you and to your industry. Tell us about *your* needs.

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Wausau Story

FROM OLD KENTUCKY AND HOOSIERLAND

by BART GRABOW, business editor,
Indianapolis News



"I'd heard that Employers Mutuals of Wausau has a unique business character that springs from its origin and home office location in Wausau, Wisconsin. I understand this is a community where friend-

liness is a way of life—where people are genuinely concerned with the other fellow's welfare as an individual rather than as a mere business contact. Employers Mutuals bring 'a little bit of Wausau' with them wherever they do business. Here's how I observed it at work in old Kentucky and Hoosierland."



74.59 mph won first 500 mile classic race in 1911 for car number 32 now in Speedway museum.

Employers Mutuals of Wausau

By "shanks' mare" to pay claims.

Al Miller, claim adjuster for Employers Mutuals of Wausau in eastern Kentucky doesn't let rugged terrain stop him. His "beat" includes the hill country as well as big cities. Lugging his typewriter with him, Al hikes over hill and stream to see the claimant. And like all Employers Mutuals' claim adjusters, Al has complete authority to settle cases right then and there. Saves a lot of time and red tape.



A new slant on workers' safety from the Speedway. Today mil-

lions of workers drive to

their jobs. That's why Employers Mutuals, ever conscious of workers' safety, both on and off the job, have a special interest in the famous Indianapolis Motor Speedway and proving ground. For here many automotive safety ideas are constantly being proved. Four wheel brakes were proved here and old number 32 had the first rear view mirror.

The Speedway's many new safety facilities were built by the H. D. Tousley Construction Company. Mr. Tousley picked Employers Mutuals as carrier for workmen's compensation. He knew he'd get the effective claim and accident prevention service he wanted. He says: "I've never had a problem Employers Mutuals haven't resolved to my complete satisfaction." In the picture, Mr. Tousley watches as Tony Hulman, Speedway owner, takes the wheel of first winner, number 32.

.....

Employers Mutuals, with more than 100 offices across the country, writes all lines of fire and casualty insurance. We are one of the largest in the field of workmen's compensation. For further information see your nearest representative (consult your telephone directory) or write us in Wausau, Wisconsin.



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BUSINESS WEEK • June 15, 1957

READERS REPORT

Relatives Omitted

Dear Sir:

Your Brown & Root story [BW—May 25 '57, p. 90] mentioned that neither of the Browns has sons. Actually, the Herman Browns have an adopted son, Mike, who enters Yale this year to work on his engineering degree. Also, the George Browns have two sons-in-law: Alfred Negley, who is president of Brown Securities Corp., and Ralph S. O'Connor, who is with the Browns' oil organization.

BROWN BOOTH

DIRECTOR, PUBLIC RELATIONS
BROWN & ROOT, INC.
HOUSTON, TEX.

Hopeless Job

Dear Sir:

I read with concern your editorial—Peace Doesn't Come Cut-Rate. [BW—May 18 '57, p. 204]—a double concern, first, because I realize the rightness of your plea, and secondly, because your approach so signally fails to deal with the cause of the public's attitude.

It is not a failure of people to realize the importance of "proper" and adequate foreign aid, it is the people's conclusion, after seeing many years of operation, that it is totally hopeless to attempt the job at the low level of efficiency that all government plans and programs have reached.

. . . Don't you think the man in the street realizes that within the past 25 years Congress has completely lost its sense of holding the country in trust? I resent your talk of an "apathetic public." Nonsense. Every second man you meet deplores the kind of people who are pouring our life's blood into the sea. There is, of course, confusion and lack of leadership, and this may look like apathy. It will take a while for enough people to get over the shock of the reversal of form of this Administration, but if, all over the country, people are talking as those whom I meet, we can't be far from an upheaval.

LIONEL L. JACOBS

LIONEL L. JACOBS & SON
WAYNE, PA.

Wrong Cue

Dear Sir:

On page 46 of your story on Televised News Panel Shows Pack a National Wallop [BW—May 4 '57, p. 46], a picture of Martha Rountree

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Values



Acco's great **VHS**[®] Wire Rope is 15% stronger ...it's tougher too, and lasts longer

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Proved 15% Stronger. By actual laboratory tests, **vhs** Wire Rope has 15% greater tensile strength than Improved Plow Steel, previously the highest-rated standard wire rope. It is the result of years of development by Acco's engineering and research staff, and is made of a new grade of rope wire by Acco's own process.

vhs Wire Rope is so much stronger that heavier loads can be handled by the same size rope, and often smaller-sized rope will handle equal loads.

Tougher...Lasts Longer. In addition to

its unprecedented strength, **vhs** Wire Rope has extra toughness and extra resistance to wear. It stands up longer under the abuse which wire rope must take in the most punishing services.

vhs Wire Rope keeps its flexibility; it resists compacting under pressure. These qualities, plus greater strength and toughness, add up to a longer life of safe service. Users across the country report that **vhs** Wire Rope lasts far longer—often twice as long—as the best ropes they previously used.

VHS Means Economy. Because of its long, trouble-free service life, **vhs** effects substantial economies through savings in operating costs. There is less down-time on equipment where **vhs** Wire Rope is used.

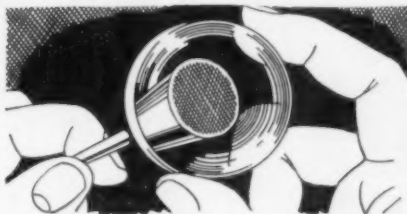
Wide Range of Uses. In the construction, logging, mining and petroleum industries especially, **vhs** Wire Rope has established its definite superiority. It stands up remarkably well in such applications as drag-lines, shovel hoist ropes, slusher ropes, logging chokers, rotary drilling lines, scraper ropes and others.

A Typical ACCO Better Value. **vhs** Wire Rope is a shining example of Acco's program of serving American business and industry by offering better values through constantly improving its products, and by creating new ones where need exists. The Acco divisions and their products are listed on the opposite page.

Why Acco products mean better values

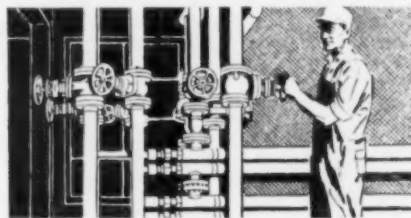
Our research, designing and manufacturing facilities are devoted to making Acco products "intentionally better" in on-job performance. Year after year, re-orders from our customers attest Acco's Better Values.

BELOW ARE ILLUSTRATED A FEW OF THE MANY OTHER ACCO PRODUCTS



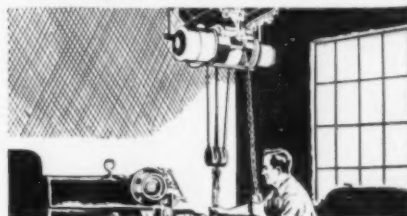
NEW ACCO ALUMINIZED WIRE

...has aluminum coating bonded to steel wire; is strong, corrosion-resistant. Available for Strand, Chain Link Fence, Telephone Wire, other purposes.



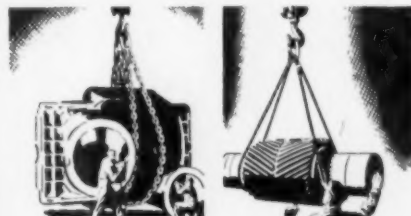
R-P&C VALVES

Satisfied users say R-P&C also stands for Reliable Protection & Control. Bronze, iron, steel and bar stock valves.



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Tru-Lay VHS
...buy either

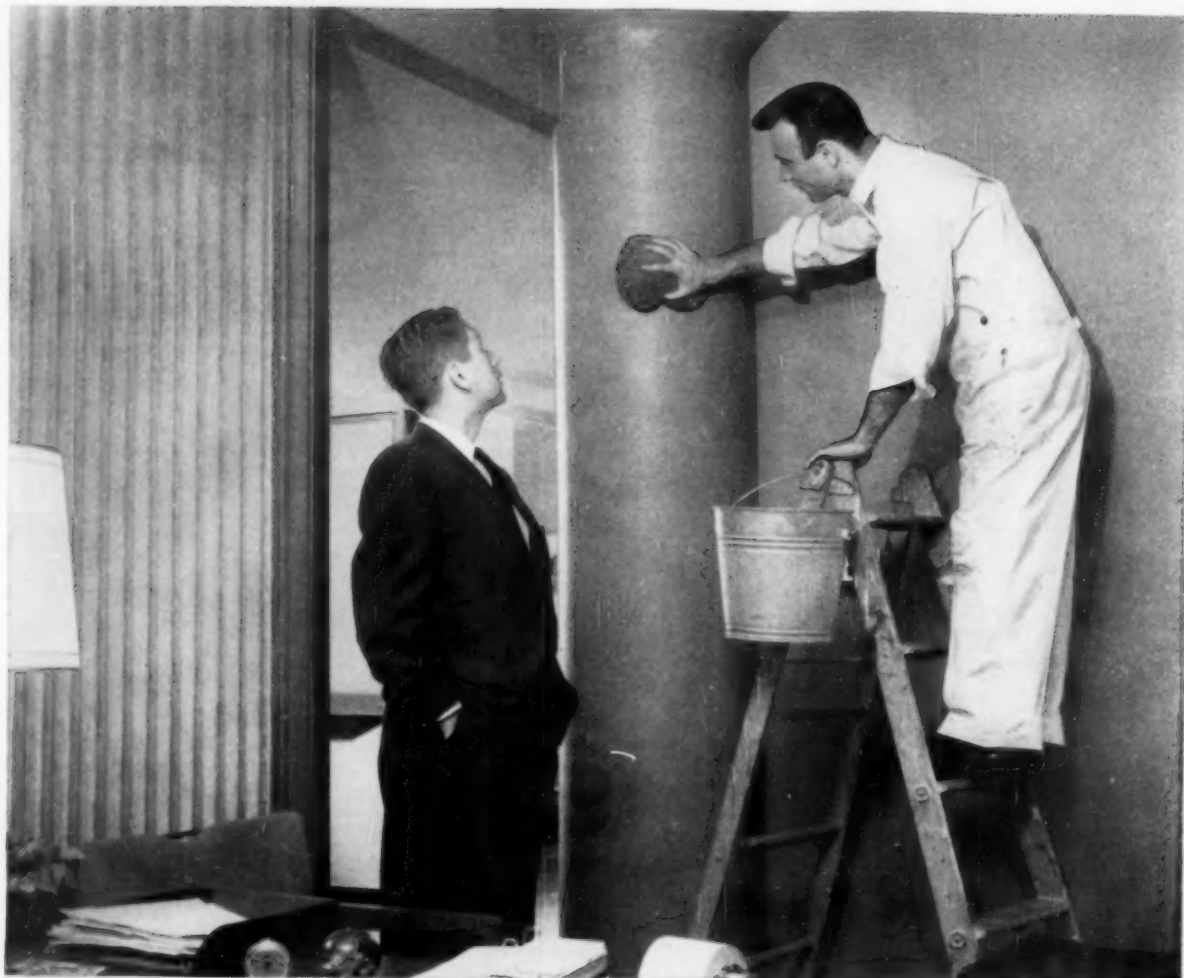
These great new wire ropes are now available everywhere from Hazard Lay-Set or American Cable TRU-LAY distributors. Both are acco-made—both are ACCO Better Values.

For Information on any ACCO product, address Market Development Department, American Chain & Cable Company, Inc., 929 Connecticut Avenue, Bridgeport, Connecticut

American Chain & Cable Company, Inc.

SALES OFFICES IN: Atlanta, Bridgeport, Conn., Boston, Chicago, Denver, Detroit, Exeter, Pa., Houston, Los Angeles, Monessen, Pa., New York, Philadelphia, Pittsburgh, Portland, Ore., Reading, Pa., San Francisco, Wichita, Kans., Wilkes-Barre, Pa., York, Pa.





WHO SAID DIRT CHEAP?

*Honeywell's Electronic Air Cleaner protects you against air-borne dirt losses 6 times better than ordinary mechanical air filters**

IT'S HARD to realize, but expenditure of most of the money that goes for cleaning soiled walls and fixtures, and is lost on marked-down merchandise can be traced to dirt particles less than 1/25,000 of an inch in size.

Now, particles this small—even 100 times smaller—can be trapped by Honeywell's new Electronic Air Cleaner *before* they cause damage.

Clearing the air of these microscopic contaminants can bring dramatic results. It drastically reduces the extra time-consuming work that normally is spent in cleaning and general maintenance required

in your offices, store or factory.

It is an impossible job for mechanical type filters to remove oil smoke, fumes, tobacco smoke and most of the fly ash and minute abrasives in the atmosphere. And these are the ones with the most intense staining power. In this area lie bacteria and viruses, too—the cause of many lost man-hours.

In many instances, the Honeywell Electronic Air Cleaner's multiple advantages make it self-liquidating.

For details call your local Honeywell office or write Minneapolis-Honeywell, Dept. BW-6-203, Minneapolis 8, Minn.

*According to tests developed at the National Bureau of Standards, electronic air cleaners remove at least 90% of the dirt particles causing the greatest staining, while ordinary mechanical filters remove only about 15%.

Honeywell

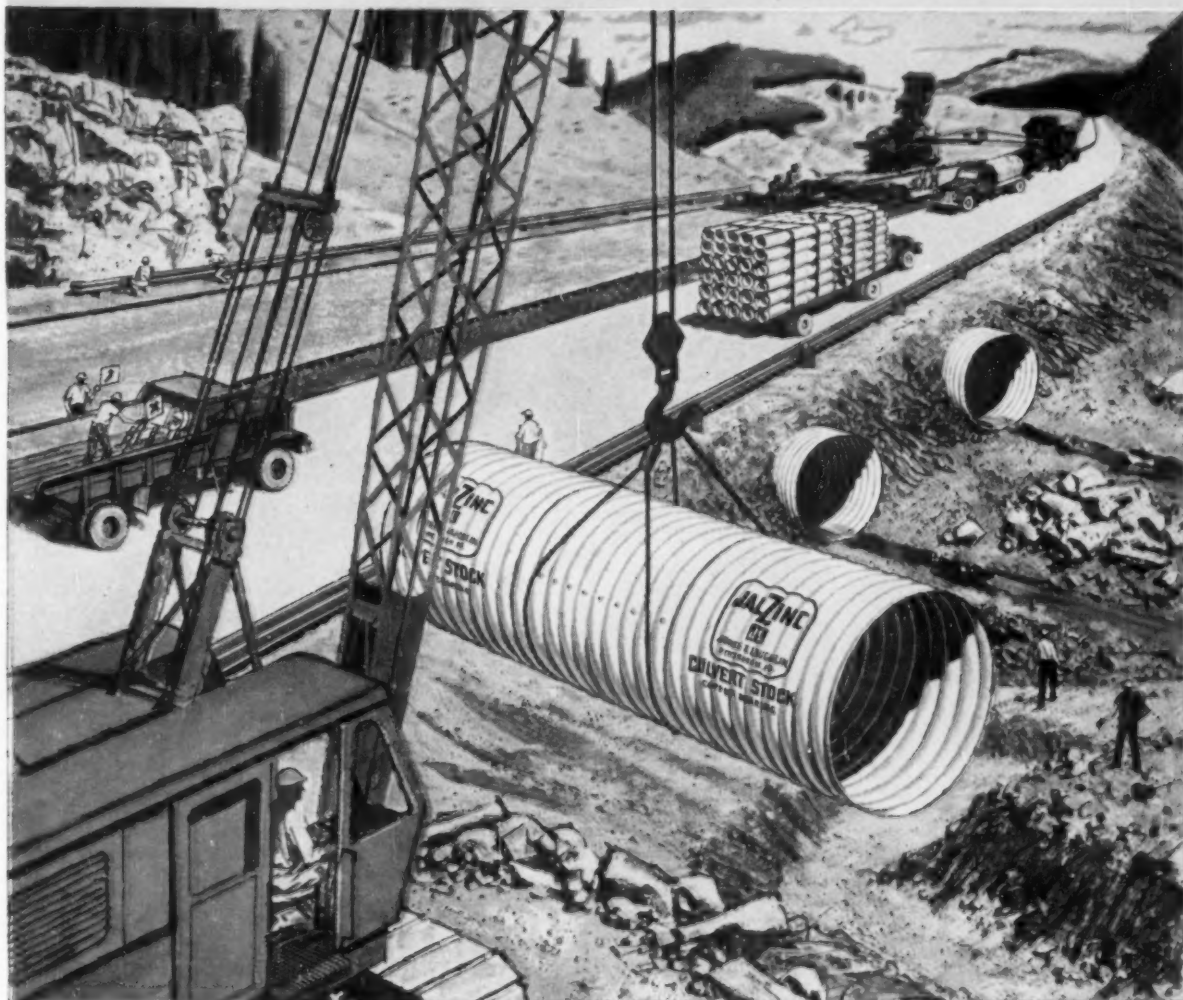


First in Controls

STEEL SETS THE PACE in highway construction...

Highway construction consumed 2,720,000 tons of steel in 1956.

Steel is the most used metal in modern technology.



JALZINC sets the pace in ZINC COATED STEEL QUALITY

JALZINC, Jones & Laughlin's new high quality zinc coated steel, is outstanding in ductility, formability and finish.

Produced on the most modern galvanizing mill in the world, JALZINC has a tight uniform coating that provides maximum durability and corrosion resistance. Coating weights from 1.00 oz. to 2.50 oz. per sq. ft. can be furnished depending on your end product needs.

Many products for highway construction, such as culverts, guard rails, metal arches, and road signs, look better and last longer when made from JALZINC sheets.

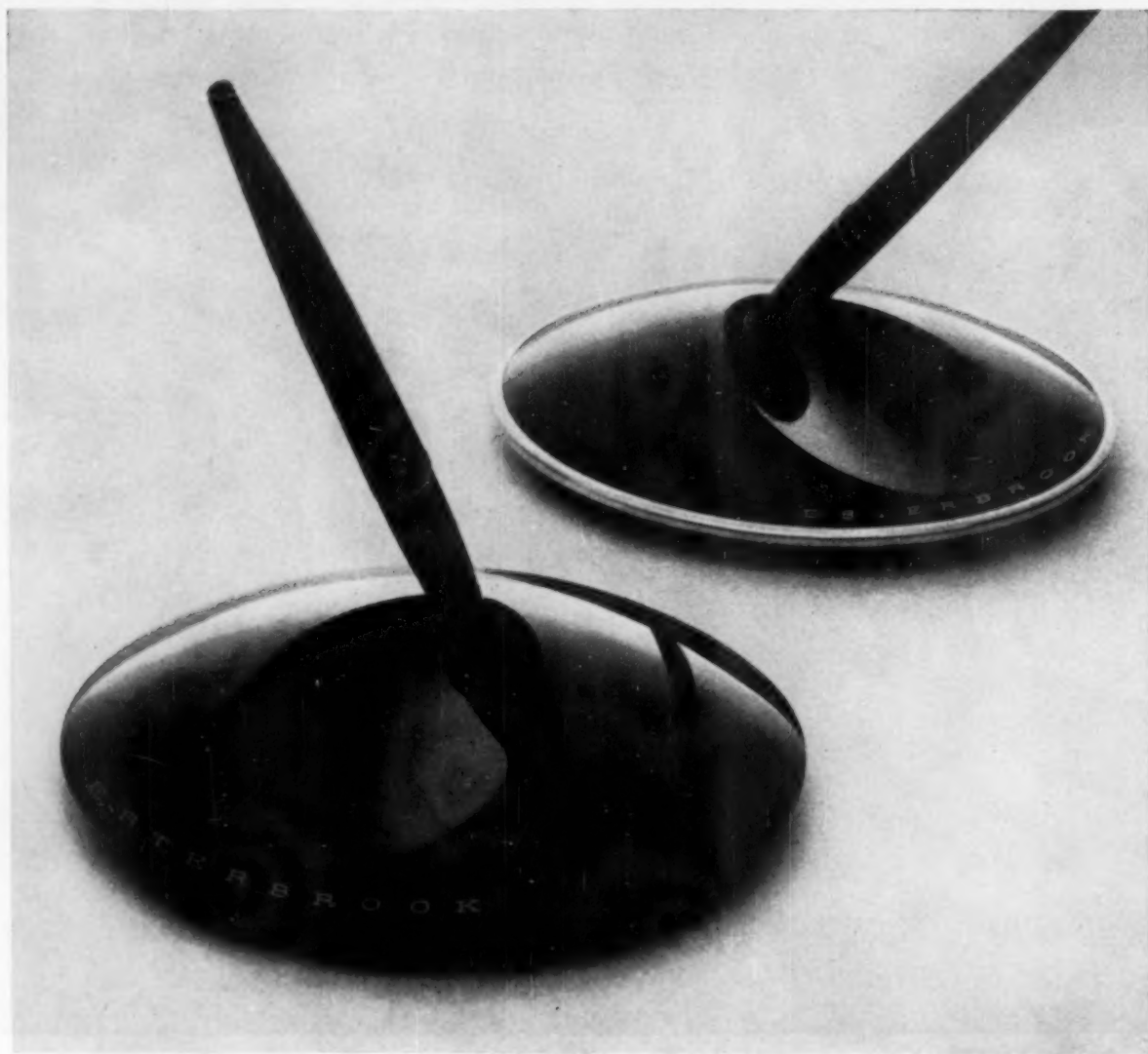
For complete details on new, high quality JALZINC, write to the Jones & Laughlin Steel Corporation, Dept. 434, Three Gateway Center, Pittsburgh 30, Pennsylvania, or call your local J&L district office.



Jones & Laughlin

... a great name in steel

ESTERBROOK presents the RECORDER*



Now a truly dependable ball point desk set

It writes 100 hours without refilling. At last, here is a desk ball point you can depend on. It took 9 years for Esterbrook to perfect the Recorder—and this painstaking craftsmanship shows in its superb writing quality.

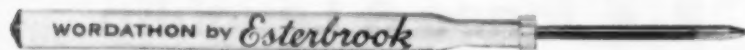
The Recorder starts writing instantly. Ink flow is steady—no blotting or “starving.” Ink won’t smear . . . yet it washes right out of clothes.

Exclusive *Wordathon* Refill Cartridge writes up to 5

times as long as ordinary ball points—more than six months’ normal office writing for only 69¢.

Think how much this can save you in convenience and low, low maintenance costs!

This amazing *Wordathon* Refill Cartridge comes in your choice of red, blue or black ink . . . fine or medium ball sizes. Try the new Esterbrook Recorder desk ball point soon. **\$2.95** at list for the complete set. Recorder de luxe, **\$3.95.**



*Wordathon** Cartridge shown full size

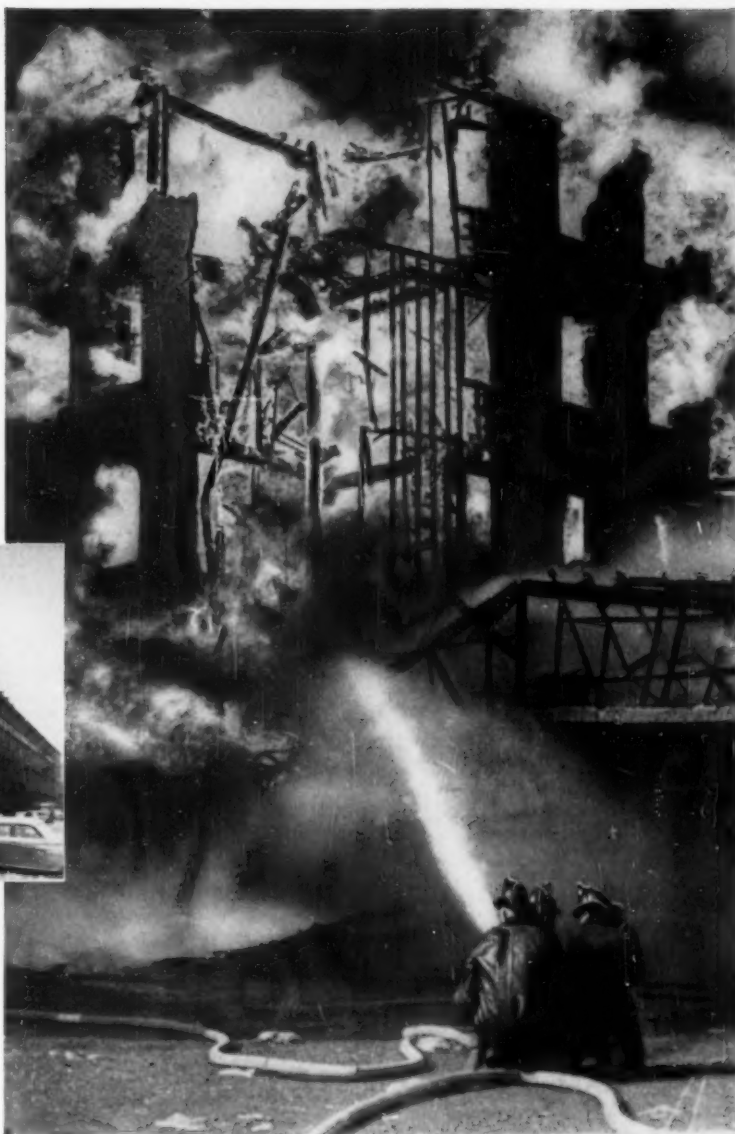
*TRADEMARK

Esterbrook

Two ways of fighting fires . . .



With Sprinklers — This is how the furniture factory of Irving & Casson — A. H. Davenport Company, Cambridge, Mass. looked at the "height" of its fire. When a flash blaze occurred in the paint department, a Grinnell Automatic Sprinkler System, installed about 1900, went into action immediately, saving the firm from disaster.



Without Sprinklers — This furniture factory was a \$200,000 loss in property alone. One employee died in the fire.

GRINNELL SPRINKLERS perform with *automatic* certainty. They stand ready, day and night, year after year, to stop fire when it starts . . . during those first few moments when a *little* water will do what *tons* of water often cannot accomplish later.

Could you afford a serious fire in your business? Will insurance reimburse you in full for the loss of buildings, equipment, records, trained personnel, valued customers, or invaluable lives?

In terms of losses from fire, the cost of Grinnell protection against fire is small. When you consider that installation of a

Grinnell Automatic Sprinkler System reduces fire insurance premiums from 50% to 90%, it will be recognized as an investment that pays for itself, and then starts paying you substantial cash dividends.

We shall gladly survey your property and submit an estimate, without cost or obligation. Write or phone us. Grinnell Company, Inc., 265 West Exchange St., Providence, Rhode Island.

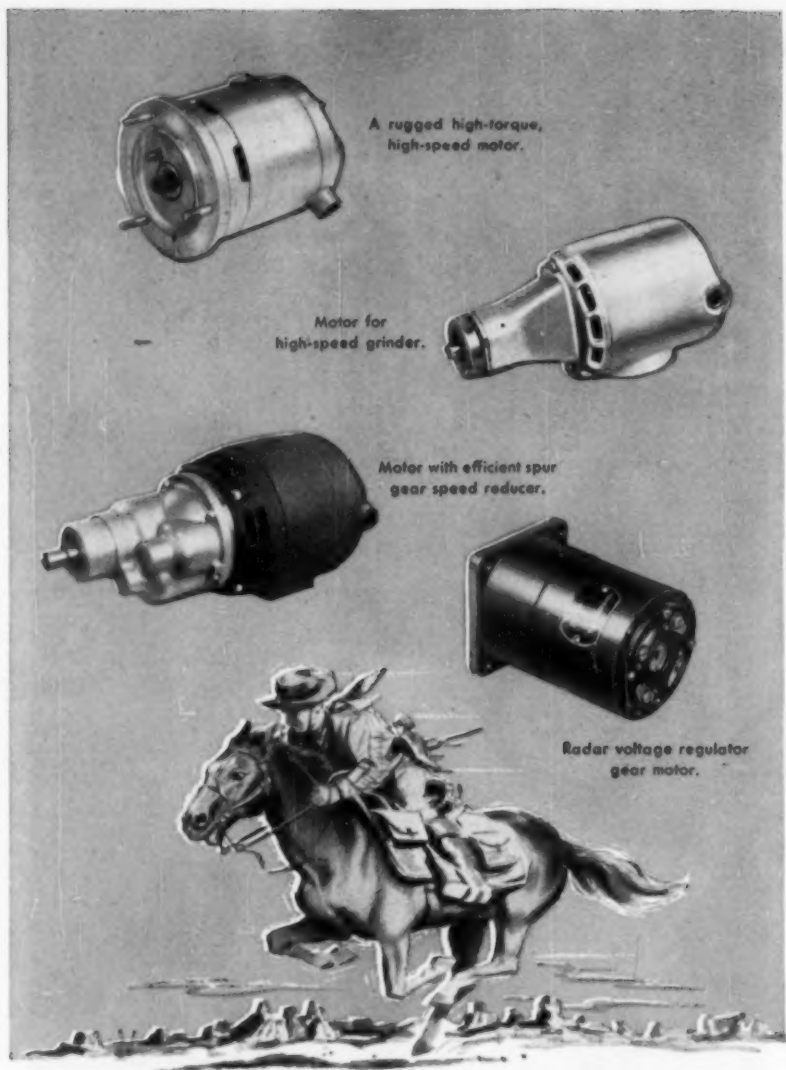


GRINNELL

PROTECTION AGAINST EVERY FIRE HAZARD



— Manufacturing, Engineering, and Installation of Automatic Sprinklers Since 1878 —



"PONY POWER" MOTORS

that give stamina to your products

Lamb Electric *fractional* horsepower motors, like the small horses of the famed western-pioneer-day Pony Express, are developed for *stamina*.

Their dependability, and efficiency (optimum weight-size-horsepower ratio) are qualities that result from proper design and careful manufacture by personnel with many years of experience in the small motor field.

May we demonstrate how Lamb Electric Motors can bring these advantages — and also perhaps lower costs — to *your* products?

THE LAMB ELECTRIC COMPANY • KENT, OHIO

A Division of American Machine and Metals, Inc.
In Canada: Lamb Electric—Division of Sangamo Company Ltd.—Leaside, Ont.

Lamb Electric

SPECIAL APPLICATION FRACTIONAL HORSEPOWER MOTORS

is shown in the lower left-hand corner pointing to a script which is on a cuing instrument known as a viewer. Your subhead describes the instrument as "Teleprompter." This is in error. The instrument is part of the cuing service which we, at Q-Tv, Inc., have been providing "Press Conference" since the inception of the show last summer.

Aside from this . . . I think the article was well done. . . .

JAMES J. QUINN

PRESIDENT
Q-TV, INC.
NEW YORK, N. Y.

Well Done

Dear Sir:

The article [BW—May18'57, p172] on Los Angeles was one of the finest I have ever read. . . .

DON LARSON

BUSINESS MANAGER
WESCON
LOS ANGELES, CALIF.

Dear Sir:

I found your Marketing Dept. article [BW—May4'57,p62] on the upsurge of mass interest in culture most stimulating. . . .

EGMONT ARENS

EGMONT ARENS, INDUSTRIAL DESIGN
NEW YORK, N. Y.

Dear Sir:

The story, Street Automates, Clips Costly Seconds [BW—May11'57,p86], which tells of the modernization of Wall Street operations, is exceptionally fine. . . .

MAURICE H. MOGULESCU

PRESIDENT
DESIGNS FOR BUSINESS, INC.
NEW YORK, N. Y.

Misplaced Cave

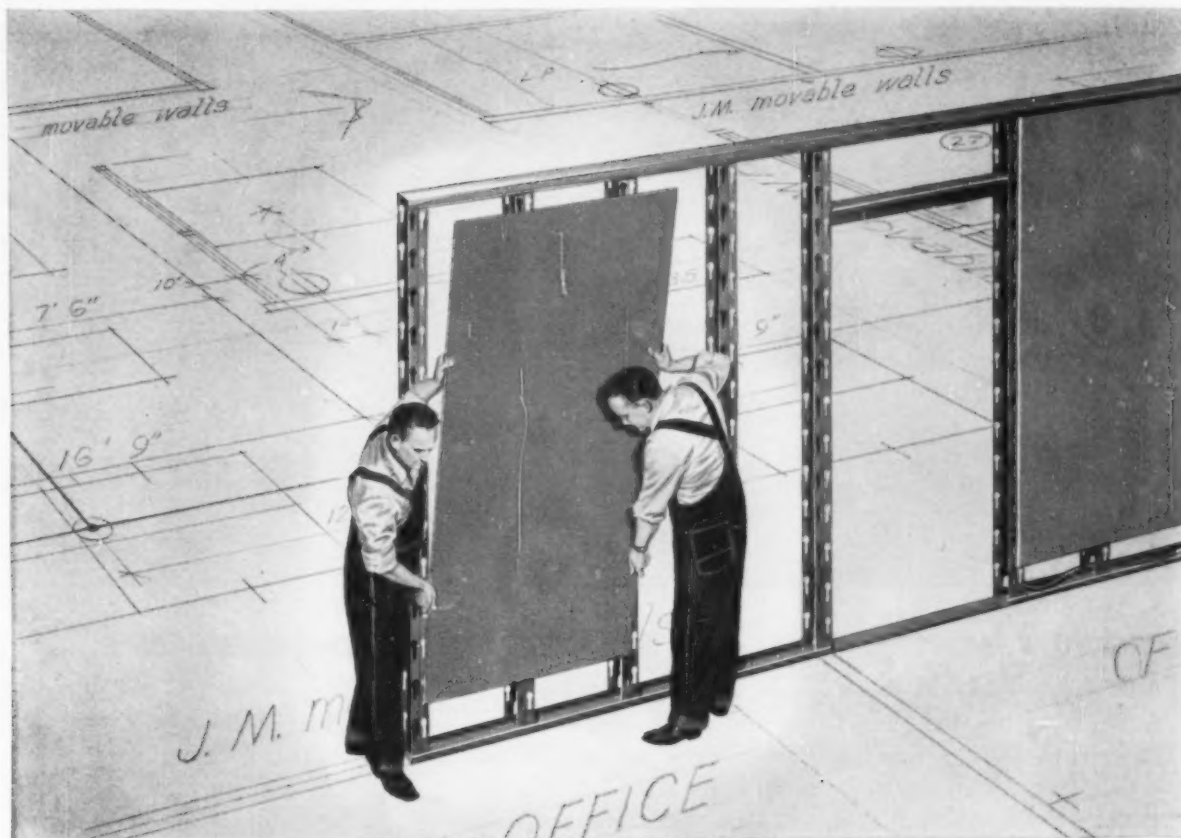
Dear Sir:

In [BW—May11'57,p169] you give an excellent discussion of vacation possibilities in the United States. However, there is a small error to which we would like to call your attention. Wind Cave National Park lies not in North Dakota but in South Dakota. . . .

JOHN F. MOON

ASSISTANT RESEARCH DIRECTOR
INDUSTRIAL DEVELOPMENT
EXPANSION AGENCY
PIERRE, S. D.

Letters should be addressed to Readers Report Editor, BUSINESS WEEK, 330 West 42nd Street, New York 36, N. Y.



Insure **efficiency** in office space, present and future

Johns-Manville Asbestos Movable Walls can be quickly changed at will

For an efficient and economical way to save space and make space, J-M Asbestos Movable Walls are the most flexible of movable partitions. They can be erected, dismantled and relocated time and time again. Yet they retain all the elements of performance, durability and attractive architectural design.

J-M Movable Walls make possible the allocation and division of space to meet the ever-changing needs of business. They help provide for better working conditions, in-

crease the comfort and improve the morale of employees.

They are prefinished in stippled, textured colors of light green, light tan and light gray, with other solid colors available on order. Their finish is scratch- and stain-resistant. Layout changes can often be made in a few days or during a weekend.

For free brochure "Asbestos Movable Walls," write: Johns-Manville, Box 158, New York 17, N. Y. In Canada, write 565 Lakeshore Road East, Port Credit, Ontario.



Johns-Manville flush or glazed partitions are furnished and erected by J-M's own Construction Department. You get undivided responsibility for a complete job.



Johns-Manville congratulates the American Institute of Architects on its 100th Anniversary.

—Consult an architect—use quality materials



Johns-Manville



How Thompson TV system speeds up rail ticket buying

Pennsylvania Station, one of the world's largest, uses 105 DAGE TV Cameras, 100 Receivers, to speed service.

BECAUSE of a revolutionary system that uses closed-circuit television from Thompson Products' DAGE Television Division, rail ticket buying at New York's Pennsylvania Station is speeded up. Telephone reservations are speeded up, too!

Now the passenger simply tells the clerk where and when he wants to go. The clerk dials a number and a space availability chart appears on a DAGE television receiver seen by passenger and clerk. (See photo above.) The passenger selects the space desired... and the clerk dials again. Then

another clerk, called a "coupon clerk", uses an electronic machine to reproduce the coupon for the space at the ticket counter. The transaction is completed. Telephone reservations are handled in much the same way at the station.

Closed-circuit television is one result of Thompson's diversified research and development that has produced many important new products for America's leading industries. Thompson Products, Inc., General Offices, Cleveland 17, Ohio.



This Pennsylvania Railroad employee, known as a "coupon clerk", keeps availability charts up to the second under the eyes of some of the 105 DAGE closed-circuit TV cameras. These cameras transmit information to ticket counters and to telephone reservation operators.

You can count on

**Thompson
Products**

MANUFACTURERS OF AUTOMOTIVE, AIRCRAFT, INDUSTRIAL AND ELECTRONIC PRODUCTS, FACTORIES IN EIGHTEEN CITIES.



This is a small part of the world's largest installation of closed-circuit television. DAGE television receivers, in the center of the photo, are used by telephone reservation operators.

CAREER OPPORTUNITIES! For men with demonstrated ability in manufacturing and management Thompson offers fine opportunities in research, development, engineering, production, sales, purchasing and accounting. We invite you

to discuss your career with a rapidly growing company serving automotive, aircraft, guided missile, electronic and nuclear markets. Write Ray Stanish, Manager, Central Staff Placement, Thompson Products, Inc., 1845 East 30th St., Cleveland, Ohio.



Another example of



**CHEMICAL
PROGRESS**

Slot wedges extruded from G-E Textolite 11580 insulate these motor windings and keep them in place under extremely high operating temperatures and

currents. Developed by G-E chemical research, Textolite 11580 is 50% stronger and lighter than aluminum, has excellent dielectric properties.

New G-E Plastic insulates electric motors, permits higher ratings in smaller frames

From glass fiber and polyester resin, General Electric chemical research has developed a hard, extrudable plastic that is stronger and lighter than most metals, yet has unusual electrical insulating properties.

The material is called G-E Textolite® 11580. Although it was developed primarily as an insulating material, its light weight and tough, flexible strength can be used in a variety of structural components.

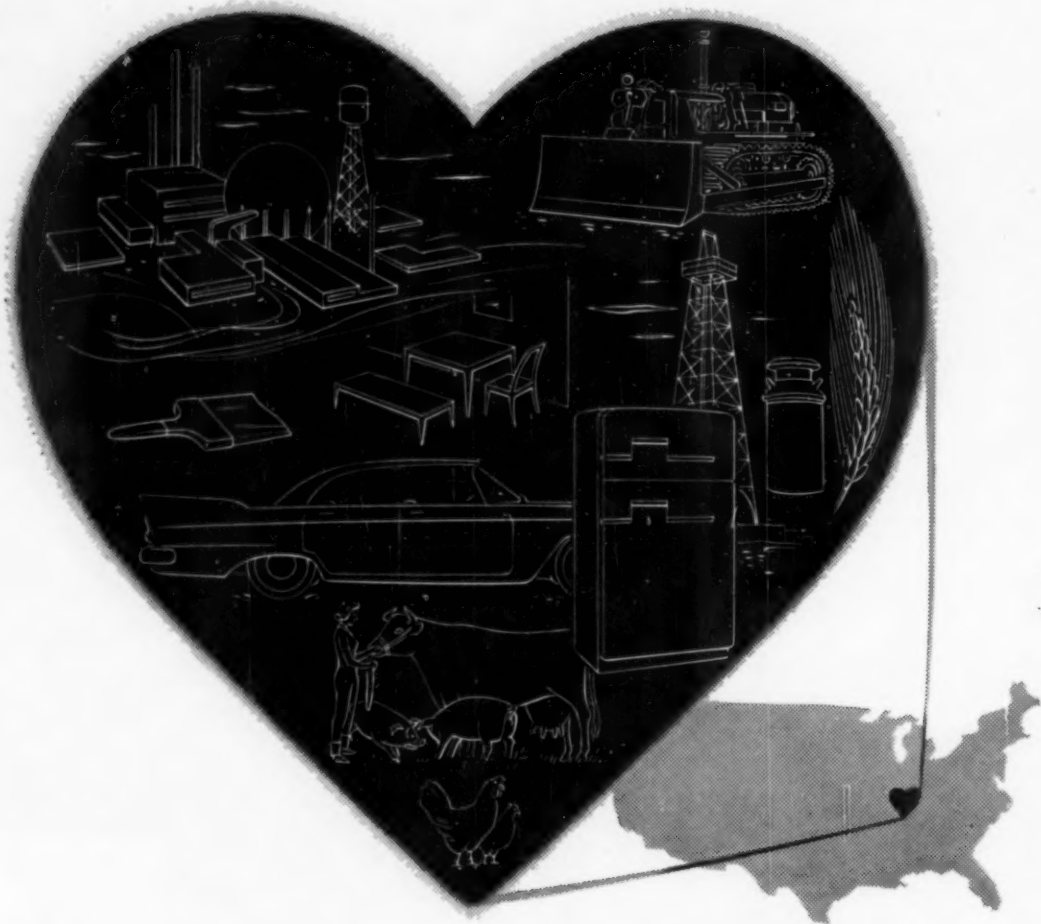
Electrical equipment manufacturers are using G-E Textolite 11580 as Class "B" insulation in motors, transformers, switchgear and electronic assemblies. G-E Textolite 11580 is acid- and solvent-resistant, will withstand temperatures as high as 275°F. indefinitely. By means of a unique manufacturing process developed

by G-E., Textolite 11580 may be extruded in a wide variety of shapes.

As an insulating material, G-E Textolite 11580 joins such other General Electric chemical discoveries as mica mat flexible insulating tape, Irrathene® irradiated polyethylene and mycalex heat resistant molded insulation. For product information on G-E Textolite 11580, write Dept. LPD, CHEMICAL and METALLURGICAL DIVISION, General Electric Company, Coshocton, Ohio.

Progress Is Our Most Important Product

GENERAL  ELECTRIC



CONSIDER THE EVANSVILLE-HENDERSON GROWTH AREA

Texas Gas Transmission Corporation recommends the Evansville, Indiana, and Henderson, Kentucky, area for consideration in your growth plans.

This versatile area, right in the population "heart" of the nation, offers a unique combination of location, soil, terrain, water and manpower that accounts for its highly diversified industrial production and its impressive growth pattern.

Texas Gas provides natural gas in abundance to Southern Indiana Gas and Electric Company, the City of Henderson, Kentucky, and other companies for distribution to homes and industries in this busy, prosperous area.

Telephone or write Texas Gas Transmission Corporation, Owensboro, Kentucky, for detailed surveys covering this vital area — served by Texas Gas.



TEXAS GAS

General Offices Owensboro, Kentucky

TRANSMISSION
CORPORATION



Stanley Kramer, Producer-Director, and star Cary Grant tell why:

"This shot will be heard around the world!"

"To shoot 'The Pride and the Passion' in Vista Vision and Technicolor — on location in Spain — was an enormous job. We lugged this 40-foot cannon over mountains — with the help of Frank Sinatra, Sophia Loren, and thousands of extras!

"It was tough work and a tough shooting schedule to meet United Artists' release date for the film!

"Without Air Express, we couldn't make it.

"We count on Air Express to pick up the cans of film in New York, rush them to Hollywood for processing and cut-

ting, fly them back for top executive screening.

"Then Air Express beats the release date by delivering hundreds of prints throughout the U. S. They speed up ground time with radio-controlled trucks — and even 'keep an eye on' all the shipments with their private teletype system!

"Surprising to me, with all this service, most of our shipments cost less than any other complete air service. 20 lbs., for instance, Hollywood, California, to Salt Lake City, Utah, is \$5.56. It's the lowest-priced complete service by \$1.94."



Air Express



30 YEARS OF GETTING THERE FIRST via U.S. Scheduled Airlines

CALL AIR EXPRESS . . . division of RAILWAY EXPRESS AGENCY



Selection of the proper cutting oil for a machining operation can mean longer tool life and increased production. This is Gulf Petro-engineering Service at work!

Fleet operators, too, can benefit by consultation with a Gulf Sales Engineer. He knows your problems—and knows how to help you cut fleet maintenance costs.



New Cost-Cutting Help for Industry... GULF PETRO-ENGINEERING SERVICE

If you're using petroleum products at all—lubricants, fuels, rust preventives, cutting oils, quenching oils, solvents, waxes, or process oils—you can probably save money with Gulf Petro-engineering Service. This service offers practical assistance on any problem or process involving the use of petroleum products. You can have this help even if you're not a Gulf customer.

Your Gulf Sales Engineer has a broad background in reducing operating and maintenance costs. Maybe he can show you how to reduce the number of lubricants you now buy. He knows all about proper selection of rust preventives... how to eliminate oil vapors, sludge, corrosion in your fuel storage tanks. Probably he can help you get

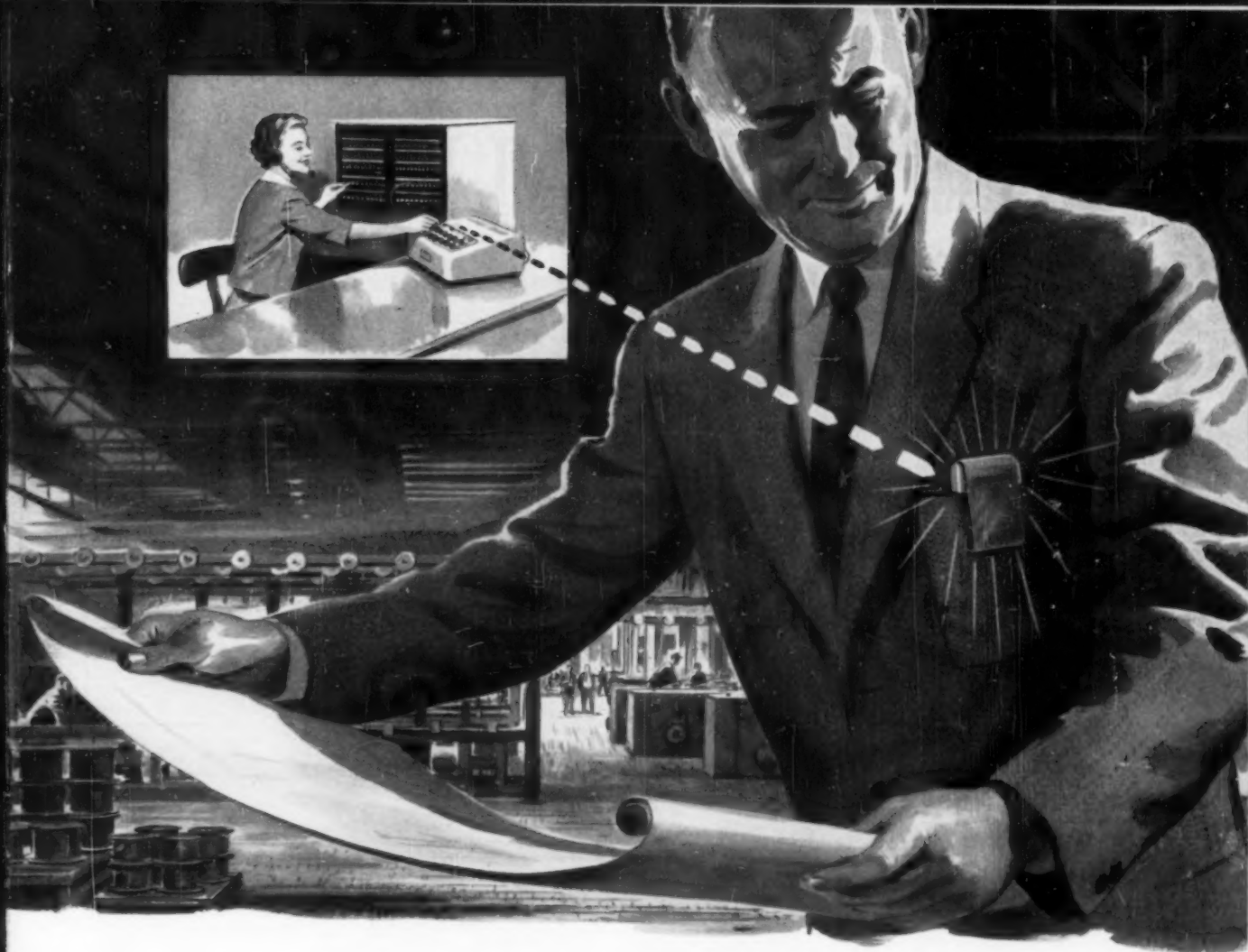
greater economy in the operation of your automotive equipment. He does this sort of thing for other companies, all the time.

If you have an immediate problem, just call your nearest Gulf office. A Gulf Sales Engineer will come at once. Write to us, for free 24-page booklet describing Gulf Petro-engineering Service.

Gulf Oil Corporation
1822 Gulf Building
Pittsburgh 30, Pennsylvania



THE FINEST PETROLEUM PRODUCTS FOR ALL YOUR NEEDS



Ever hear your coat pocket call you?

It could happen—and you'd not be startled, but gratified.

Take a busy man like yourself—apt to be away from your desk dozens of times a day. Somebody wants you, and quickly! What's the fastest, easiest way to locate you?

Your secretary *can* go on a dead run through the building. The switchboard operator *can* ring every phone and ask if you're there. But, in this modern age, there must be a more streamlined method.

We have the perfect answer in our PAGEMASTER® signaling system. Clipped to your coat or shirt pocket is a miniature receiving unit. Next to your telephone operator's switchboard is the small PAGE-

MASTER signaling device. If you're wanted, the operator puts your code call "on the air." Wherever you are, when your personal signal unit gets *your* frequency, and yours alone, it buzzes gently and pleasantly, telling you to pick up the nearest telephone and call the operator.

Industry is only one application. Hospitals, public auditoriums, construction projects are others. And you can visualize the value of this PAGEMASTER signaling system, on a city-wide basis and in matters of Civil Defense.

A descriptive booklet and your distributor's name sent on request.

"There is nothing finer than a Stromberg-Carlson!"®



STROMBERG-CARLSON COMPANY

A DIVISION OF GENERAL DYNAMICS CORPORATION

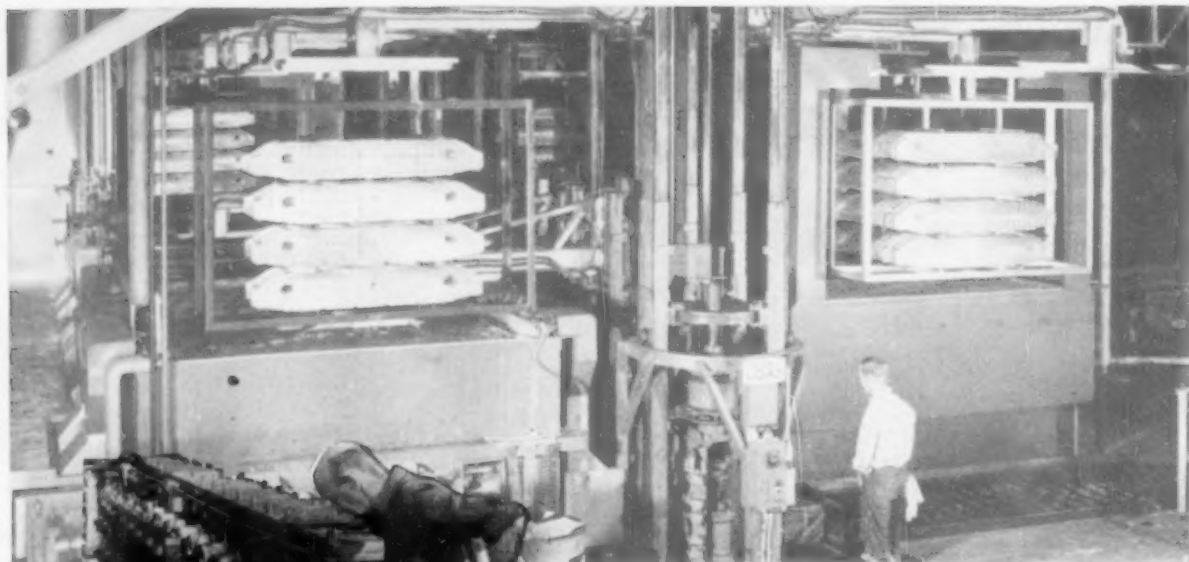
General Offices and Factories at Rochester, N. Y.—West Coast plants at San Diego and Los Angeles, Calif.



Civilian and Military Electronic Products • Telephones and Central Office XY® Dial Equipment, Pagemaster®, Relays and Switches • Sound Systems, Radio and Hi-Fi

Here's how

REYNOLDS ALUMINUM



This new Reynolds automatic aluminum finishing system can finish mixed sizes and types of parts and chemically brighten or anodize them in different colors—and can handle several different jobs at the same time. An automatic coding system establishes the individual finishing specifications for each job.

You get the advantages of economy, dimensional accuracy, better finishes and design freedom in roll formed aluminum shapes from Reynolds. Reynolds makes these shapes available in embossed patterns, paint finishes and plain or color anodized finishes.



Brazing, (above) and welding, (left) are daily fabricating operations at Reynolds. Crater-free fusion welding, inert-gas-shielded metal arc welding and other types of welding are handled quickly, efficiently at Reynolds.

See "CIRCUS BOY", Reynolds exciting dramatic series,
Sundays, NBC-TV

FABRICATING FACILITIES

cut costs, speed production, improve products
for many industries

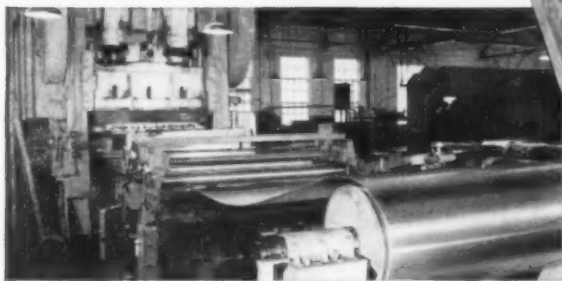
Start with your costs. Reynolds can reduce them because Reynolds has the right type of equipment available for fabricating and finishing your aluminum parts. This saves you capital outlay for equipment and added plant capacity. Parts from Reynolds also release your valuable floor space, reduce your raw material inventory and handling costs, eliminate scrap loss, scrap handling expense and reject costs.

Take production. Men, machines and experience assure speedy delivery of your aluminum components. There are good examples of Reynolds

modern production equipment on these pages.

Improved products? Yes, because Reynolds controls quality from mine to finished part. Reynolds technological know-how in producing and fabricating aluminum can definitely contribute to your new products.

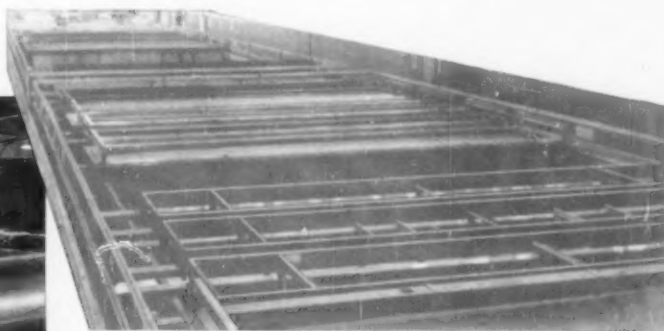
Send for your copy of Reynolds "Complete Facilities" brochure. And for the assistance of Reynolds Styling and Engineering Service and for details on Reynolds fabricating and finishing facilities, contact your nearest Reynolds Office or write to the address below.



Over 200 pieces of major fabricating equipment are available in just two Reynolds plants alone. Above is part of a battery of Reynolds new high speed coil fed presses.



Scratch-brushing, satin finishing, embossing and other mechanical finishes are available from Reynolds. Here is part of a battery of Reynolds new high speed buffing equipment.



This new Reynolds half-block long anodizing installation can handle parts up to 24' long, 12' high and 4' wide.

The Finest Products
Made with Aluminum

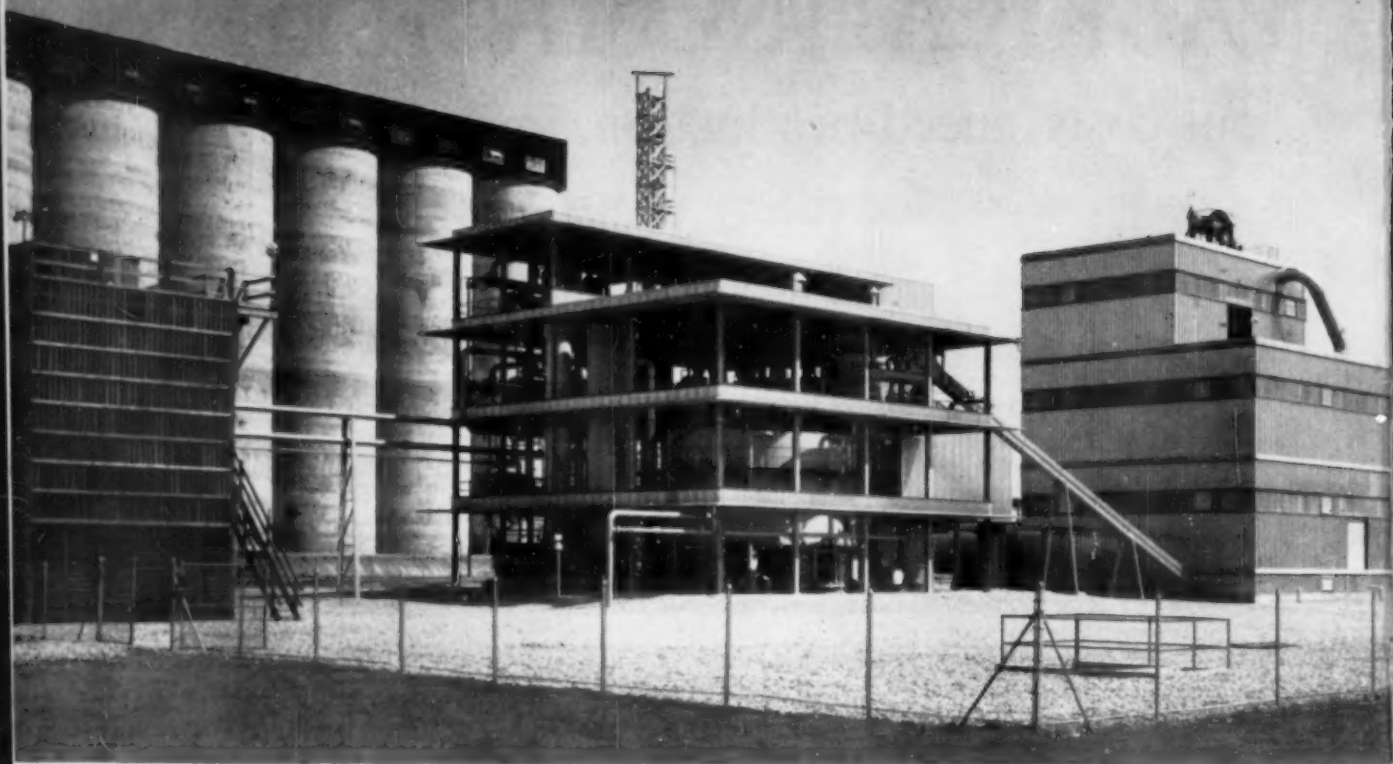
are made with

REYNOLDS ALUMINUM

**REYNOLDS
ALUMINUM**
Fabricating Service

2085 South Ninth St., Louisville 1, Ky.

BLANKING • EMBOSING • STAMPING • DRAWING
RIVETING • ROLL SHAPING • TUBE BENDING
FORMING • WELDING • BRAZING • FINISHING



Ultra-modern soybean processing plant. Completely exposed building, center, houses giant Blaw-Knox Rotocel that extracts oil from soybeans.

BLAW-KNOX has what it takes
— to shape the future of dynamic industry

For almost 5,000 years China and Manchuria had a virtual monopoly on soybean cultivation. But within the past 20 years the United States has become the world's largest producer of soybeans—our annual crop value having zoomed from \$35 million to over \$800 million.

Beginning with the pioneering development stages in this country, Blaw-Knox has engineered and constructed 39 soybean solvent extraction plants, whose combined annual capacity is well over four million tons of soybeans—more than one-half of all soybeans processed in the United States.

By applying engineering principles and techniques, in place of rule-of-thumb methods, Blaw-Knox has made many vital contributions to this dynamic growth of the soybean industry. An out-

standing example—the Rotocel invented by Blaw-Knox to extract oil from the beans. First unit, built in 1948, had 75 tons per day capacity. World's largest unit, built in 1956, has 16 times the capacity—1200 tons per day. And the ultimate output of a Rotocel has not yet been reached.

This type of Blaw-Knox experience and know-how is readily available in all fields of chemical, petro-chemical, petroleum, and nuclear energy processes. A contract management service covers every phase—from initial concept to completion and operation of the plant.

For an interesting, informative look at the many products and services we offer the construction, public utilities, metals and process industries, write for your copy of "This is Blaw-Knox."



BLAW-KNOX COMPANY

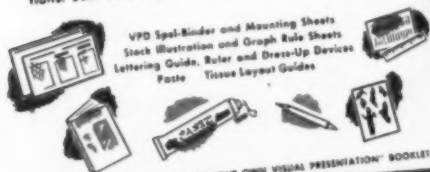
1201 Blaw-Knox Building • 300 Sixth Avenue
 Pittsburgh 22, Pennsylvania

Professional-looking
do-it-yourself sales
presentation does it with



**UNIQUE VPD SELL-IT-KIT COMES COMPLETE
SELLS FOR ONLY \$8.95**

Available from the Joshua Meier Co. of New York, or from stationery dealers, the VPD Sell-It-Kit includes everything to make professional-looking sales presentations. Just look what this new do-it-yourself kit offers:



And a VALUABLE "HOW TO MAKE YOUR OWN VISUAL PRESENTATION" BOOKLET

**JOSHUA MEIER'S VPD SELL-IT-KIT DEPENDS ON ACETATE
FOR BETTER VISIBILITY, PROTECTION, DISPLAY**

There's no better material for enhancing visual appearances . . . for stimulating sales . . . than Celanese acetate. Because of this, acetate is most widely used where sales appeal shows immediate results.

Joshua Meier's VPD Sell-It-Kit is a good example of this. It depends on acetate's sparkling grainless clarity to help you tell a clear sales story. And because acetate stays flat, can be easily cleaned, sales presentations remain fresh looking—retain full selling impact, even after long use.

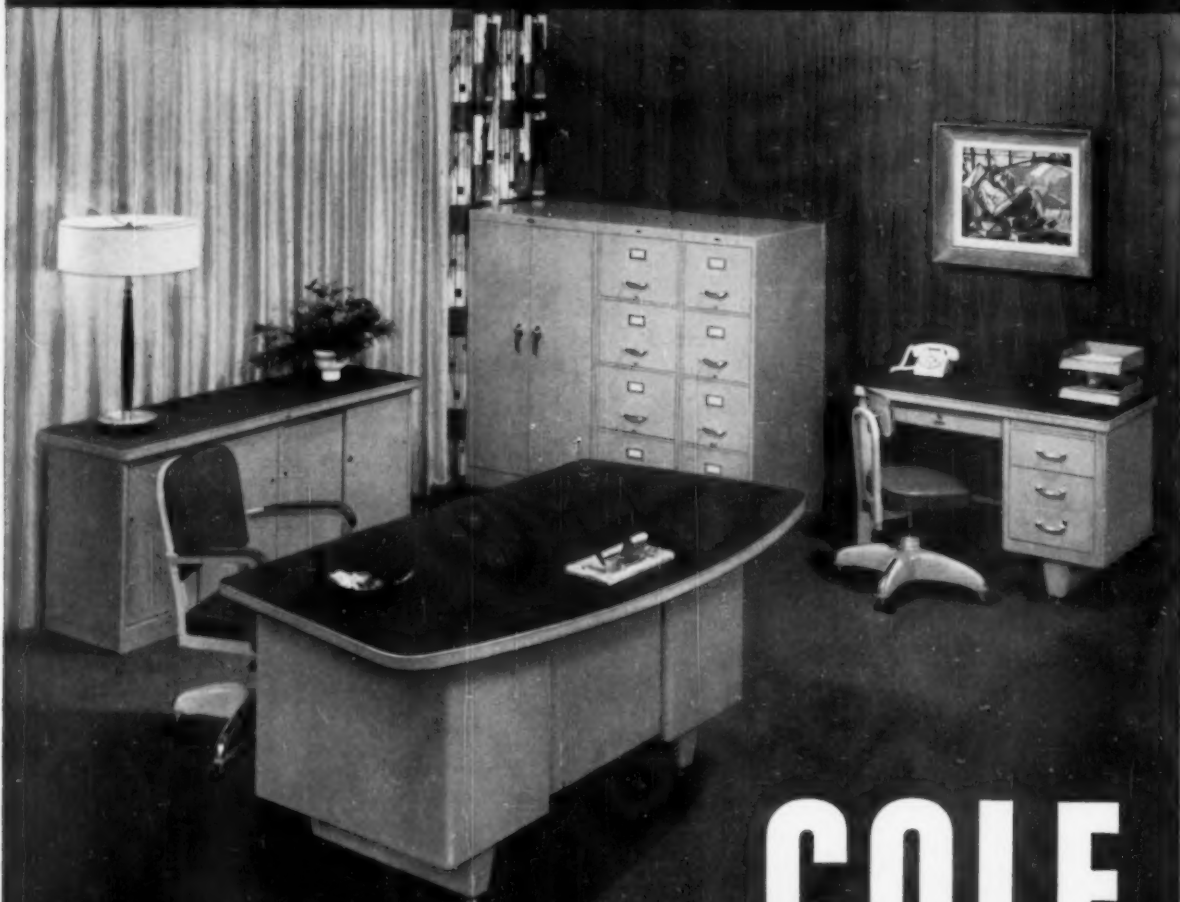
Celanese acetate has proved itself the perfect material for making better first impressions, for visual selling—that's why so many manufacturers use acetate in entire lines of sales presentations and visual recording systems.

Celanese Corporation of America, Plastics Division, Dept. 129-F, 744 Broad Street, Newark 2, N. J. Canadian Affiliate: Canadian Chemical Co., Limited, Montreal, Toronto, Vancouver. Celanese®

Celanese ACETATE SHEETING

Export Sales: Amcel Co., Inc. and Pan Amcel Co., Inc., 180 Madison Avenue, New York 16, N. Y.

*your company is judged
by the office you keep!*



COLE STEEL

First impressions are usually lasting impressions. For this reason giant enterprises such as the Ford Motor Co., Western Electric, General Motors and the Bethlehem Steel Corporation, to name a few, use Cole Steel equipment. In addition, thousands of smaller firms, medical offices, architects, accountants and engineers specify Cole Steel equipment.

Send for our latest catalog



Cole Steel Equipment Co., Inc. • 415 Madison Ave., New York 17, N. Y. • Canada: 329 Dufferin St., Toronto, Ont.



I
just
LOVE

*With Annalisa this is no abstract love. She really does.
She rides the neighbor's pony and occasionally a big grown horse.*

*That's the way family life in Arkansas is—
ponies and a fifteen minute drive to work.*

*The Arkansas Industrial Development Commission,
State Capitol, Little Rock.*

HORSES

THIS IS ARKANSAS



SOUND-LEVEL METER 4:25 P. M. SATURDAY



SOUND-LEVEL METER 10:16 A. M. MONDAY

How to tame store noise without closing shop

SOUND-CONDITION with beautiful new Armstrong Ceilings.

They can be installed quickly to avoid loss of open-for-business time.

LOOK at the meters in the pictures above. See how the needle on the meter at the right has dropped? It shows how an Armstrong acoustical ceiling reduces disturbing noise. And best of all, the ceilings can be installed practically overnight.

An Armstrong Ceiling will sound-condition your store by absorbing up to 85 per cent of the noise that strikes it. The ceiling provides a comfortably quiet, more pleasant atmosphere for sales people and customers alike.

There are other benefits as well. Armstrong Ceilings are factory prefinished so they can be installed without painting. And once they're installed, you'll notice a big improvement in glare-free lighting. With several materials to choose from, compliance with building codes is never a problem.

Call your Armstrong Acoustical Contractor today. He's a specialist at making fast sound-conditioning installations with little or no interference in store routine. He'll be glad to give you

a detailed job analysis and estimate without obligation.

For your free copy of "Quiet at Work," write the Armstrong Cork Company, 4206 Indian Road, Lancaster, Penna.

Armstrong

ACOUSTICAL CEILINGS

Cushiontone® • Travertone® • Crestone®
Minatone® • Arrstone® • Corkoustic®

*TRADE-MARK

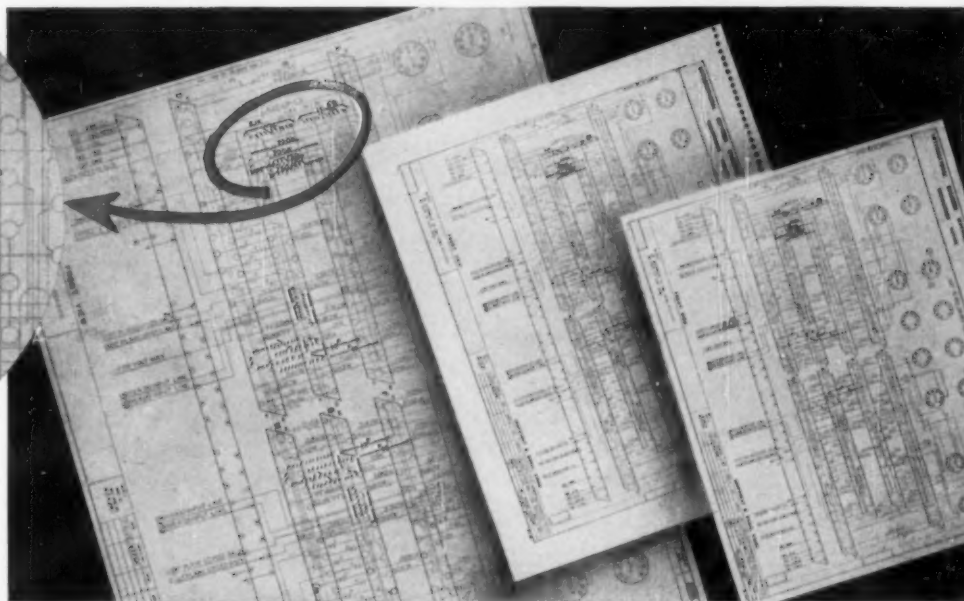
HOW **XEROGRAPHY** cuts duplicating costs THOUSANDS OF DOLLARS YEARLY

IN PRODUCT DEVELOPMENT LABORATORY OF

IBM



Enlarged section of an IBM direct-reading, reverse-run sepia intermediate on which a **visual** engineering change has been pencilled in orange. The change thus appears in boldface black on an offset paper master prepared by xerography and on multiple runoff copies, while unchanged areas of the drawing remain gray or subdued.



From left, an altered IBM sepia intermediate of an original engineering drawing, next an offset paper master prepared by xerography, and finally a sample of multiple copies run off on an offset duplicator.

It is significant that International Business Machines Corp., whose efforts for years have been identified with simplifying the complexities of data processing, is today combining xerography—the fast, dry, electrostatic copying method—with offset duplicating as the most efficient and economical way to deliver vital engineering drawings and change notices in time to meet production and field demands.

Before the installation of XeroX® Model 1218 copying equipment, which reduces engineering drawings as large as 24" x 36" to convenient 11" x 17" size, the presentation of complex electronic-wiring changes was a perplexing problem to IBM. Now, *visual* change notices are made possible by xerography, and are put through quickly. *Visual* changes are far more effective because they are easily understood.

Here's how the new system works:

Working on a direct-reading, reverse-run sepia intermediate, an engineer cross-hatches out the portion of

the original drawing to be altered, and boldly pencils in the new detail in orange (as shown in illustration). The intermediate is then copied by xerography (3 minutes) onto an offset paper master, and multiple copies for several departments and a reserve are quickly run off. Drawing alterations are emphasized in bold face; unchanged areas appear subdued.

The need for change writers and typists is greatly reduced. From the paper master, two vellum transparencies are run off—one for limited future re-runs, the other for record security and storage.



Xerography copies anything written, printed, typed, or drawn • Same, enlarged or reduced size • Copies onto all kinds of masters—paper, metal, spirit, translucent—for duplicating • Copies line and halftone subjects.

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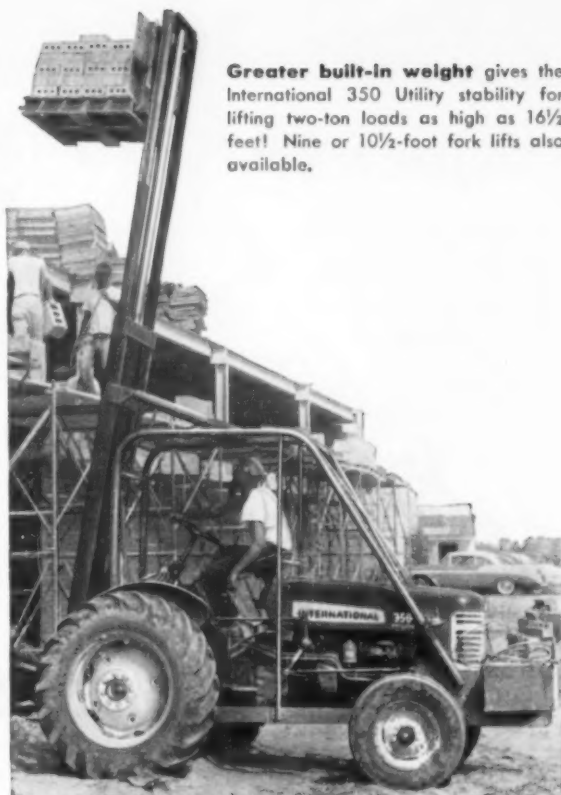
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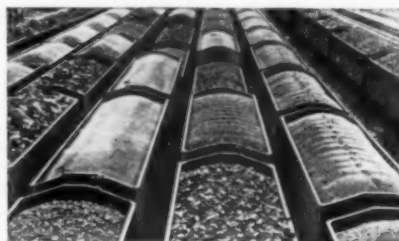
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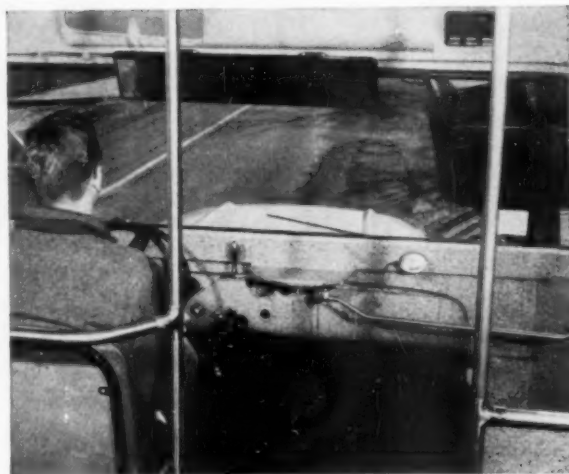
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▲ **REPEL INSECTS.** Developed by the USDA, and produced by Hercules, new meta Delphene* has proved itself an unusually effective compound against a wide variety of insects including mosquitoes, biting flies, chiggers, ticks, fleas. The Hercules background in xylene chemistry, plus rigid quality control procedures, yields a repellent with 83% minimum meta isomer content, suitable for a cosmetic chemical. Note how mosquitoes in test cage cling to the glass and shun the man's arm above the black line, while they feast on his untreated wrist and hand—USDA Photo. *Hercules Trademark.

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G57-6

BUSINESS OUTLOOK

BUSINESS WEEK

JUNE 15, 1957



Inventory reduction is being carried out this year with relatively small hurt to employment, personal income, and over-all output.

Jobs aren't quite so easy to find as in 1955 and 1956. Factory workers aren't getting so many hours work each week. And average weekly earnings in manufacturing have declined a bit since yearend.

Yet unemployment in May was little changed from a year ago.

One striking thing about the labor market is that there are hardly any more people working or looking for work than last year.

In other words, there has been no growth in the work force.

This is abnormal, of course. Even though today's new workers come from the well-known "hollow generation," normal year-to-year growth in the labor force should be half a million or so.

It hasn't grown; retirements have canceled out the newcomers. Excessive retirements mean attractive jobs are hard to find.

Failure of the labor force to grow is compensated, incomewise, at least in part from other sources. Most of the jobless get **unemployment compensation**. The oldsters go home and draw **social security**.

Higher social security benefits (BW—May25'57,p35) show this.

May broke a two-year skein in which employment each month set a new high for that month. It should be noted, however, that this was due to low **farm** employment; **nonfarm** jobs once again were at a new high.

Yet the new records are being set with no help from manufacturing.

Factory employment has declined each month, January through May.

Actual production-line workers are 200,000 fewer than a year ago, 50,000 below 1955, and 1-million under the 1953 total.

Factory workers averaged 39.7 hours on the job last month, lowest since 1954 and down half an hour from January and February. The highest level during 1956-57 was the average of 41 hours a week in December.

Average weekly earnings were \$81.70—down for the third consecutive month (though \$2.50 better than a year ago). December's peak was \$84.

Cost control in manufacturing doubtless is aided by fewer workers on the payroll and the shorter work week. In fact, cost control in the form of **automation** clearly is creating these employment trends.

This, in turn, is forcing an increasing number of unskilled and semi-skilled hands to find jobs elsewhere (and the continuing low level of unemployment indicates they have been successful).

Construction looms larger than ever in the country's economy.

- Building of **new homes** has taken a turn for the better since early spring. Housing starts are back close to a 1-million annual rate.
- Spending for **additions and alterations** to existing homes has been greatly understated by estimates in use heretofore.

BUSINESS OUTLOOK (Continued)

BUSINESS WEEK

JUNE 15, 1957

Reappraising the amount of work done on houses already in use adds nothing to business activity—past, present, or future. Rather, it helps us understand the size—and shape—of the housing market. And it explains why the deep 1955-57 drop in new homebuilding hasn't hurt more.

It highlights additions and alterations as a factor in demand for materials and furnishings, as a provider of employment and wages.

Such work reached a value of \$3.7-billion in 1956, the new figures prepared jointly by the Depts. of Commerce and Labor indicate (a radical change from the old figure of \$1.4-billion). And it's a good guess that 1957's volume will fall only a very little short of \$4-billion.

Home improvements this year will apparently account for nearly 25% of all the money spent in homebuilding. Last year it weighed in at 20% (although, if you've been in the habit of looking at the old figures, you will be thinking of the ratio as less than 10%).

The value of all work done on new homes this year apparently will be little more than \$12-billion (down from \$13½-billion in 1956 and the peak of virtually \$15-billion in 1955).

Housing starts, by postwar standards, haven't recovered to a very spectacular level. Nevertheless, their estimated annual rate of 990,000 in May is up from a low of 800,000 in March—a 12% rebound.

The earlier peak came in December, 1954, and January, 1955, when the rate topped 1.4-million a year. The best calendar year, of course, was 1950 with its 1,396,000 starts, followed by 1955's 1,329,000.

—•—

Production cutbacks due to disappointing demand spread in two largely unrelated fields this week—nonferrous metals and petroleum products.

- American Zinc, Lead & Smelting cut operations at two smelters.
- Oil companies generally reduced crude oil runs to refineries. The effort apparently is to reduce product output about 20%.

Demand remains slack throughout the oil industry—all the way from crude to gasoline—and storage supplies abundant.

Reduction in refinery runs will take the pressure off storage stocks. But it raises the question of crude oil price stability again, for most of the big refineries purchase a good share of their crude throughput.

And imports may complicate things still further. Middle East oil, even after recent price hikes, still undersells U.S. crude at New York. The collapse in tanker rates since Suez accentuates this advantage.

—•—

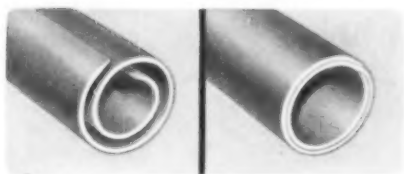
When auto users slowed down their buying of new cars last year, it stood to reason that old cars would have to run longer.

And that's the way it seems to have worked out. Scrappage, rising rapidly in the 1950s, hit a record with about 3¾-million junkers in 1955. Then the rate stopped rising; 1956 scrappage, on the basis of preliminary figures, seems no more than to have matched 1955's.

Export cargo, shipped overland via Direct Transit Lines, Inc., Grand Rapids, Mich., meets a Norwegian freighter docked at a Lake Michigan port, to begin its journey through the Great Lakes and the St. Lawrence Waterway. On-schedule deliveries are routine for powerful trucks built by International Harvester Co., Chicago. One reason: International specifies dependable Bundyweld for vital fuel, oil and brake lines.



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Bundyweld, made by the exclusive process shown at left, is the safety standard of the refrigeration and automotive industries. In fact, 95% of today's cars use Bundyweld for fuel, oil and hydraulic lines, averaging 20 applications each.

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Even the most attractively designed building is bound to have a shoddy exterior appearance if there are distorted reflections wiggling in every window. And the view from inside is not clear and sharp. That's why architects recommend glazing good buildings with Libbey-Owens-Ford *Parallel-O-Plate*® Glass, the most distortion-free plate glass made in America. It doesn't cost a great deal more than ordinary window (or sheet) glass, and it makes your building look like a million dollars. Just ask your architect.

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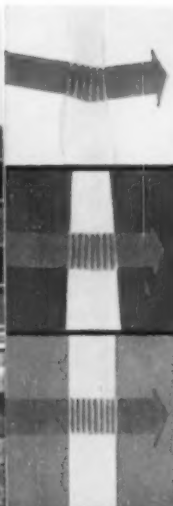
LIBBEY·OWENS·FORD GLASS COMPANY, TOLEDO 3, OHIO

HERE'S THE DIFFERENCE: The glass in these two windows is backed with black composition board to simulate the mirror effect of windows in a building. In the window at the left, glazed with *Parallel-O-Plate*, the reflections are mirror-perfect. In the other, glazed with window (or sheet) glass, note the distorted reflection.

BELOW: How the photograph at the left was made at the office building of the EC & M Division of The Square D Co., Cleveland, glazed with plate glass.



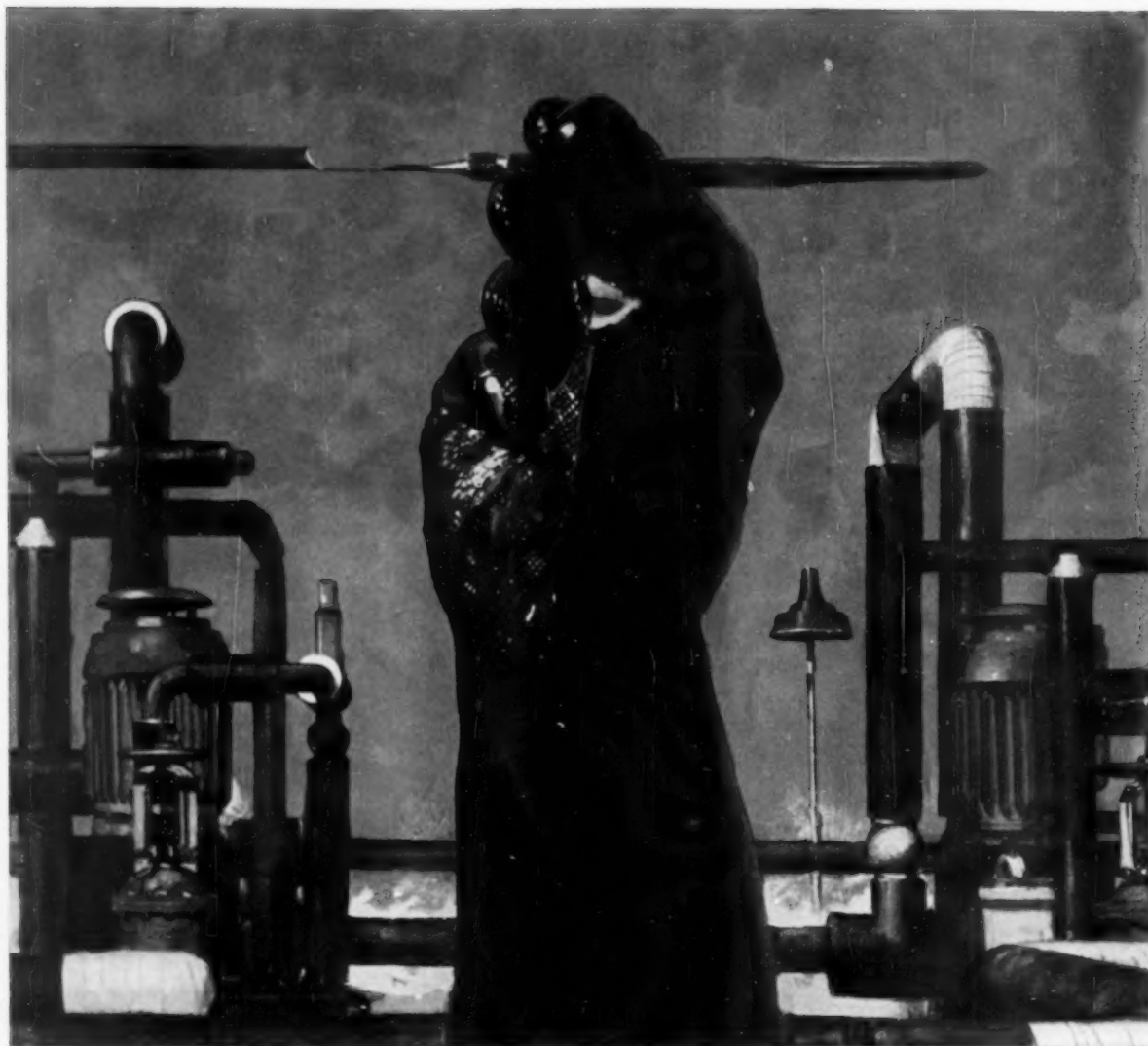
what causes distortion?



WINDOW GLASS: Its surfaces are fire-polished . . . not ground for uniformity of thickness as is plate glass. As a result, the surfaces are wavy and there is distortion of vision and of the reflections in the glass.

ORDINARY PLATE GLASS: It is ground and polished one surface at a time. While its thickness is more uniform than that of window glass, the thickness does vary and some distortion results.

PARALLEL-O-PLATE: Its surfaces are twin-ground—both sides ground at the same time—then polished. This produces more perfect parallelism than any other method of making plate glass. This uniform thickness results in greatest freedom from distortion.



An acid-splashed Neoprene glove, a draftsman's pencil, a complex and angular pattern of a partially completed piping system are combined by Stanley Meltzoff to tell the exciting story of the progress and growth so evident in the chemical industry.

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UNITED ENGINEERS

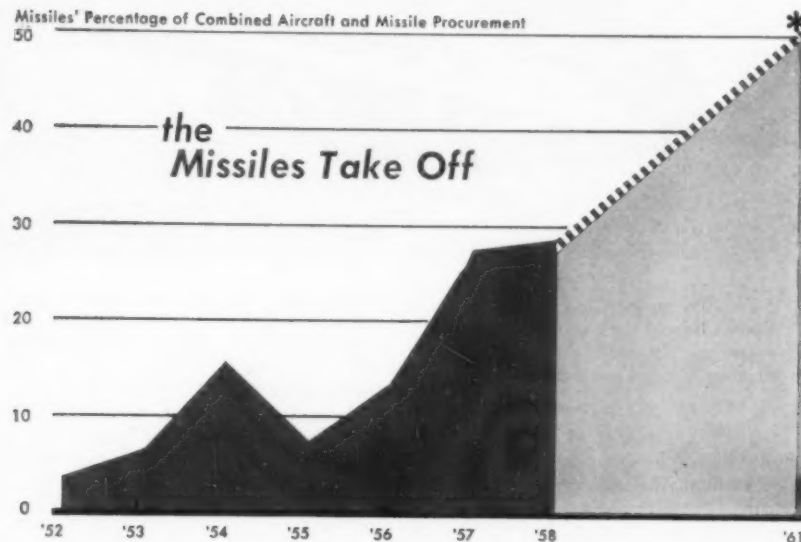
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Missiles' Percentage of Combined Aircraft and Missile Procurement



* BUSINESS WEEK Est.

Industry Braces for Big Change

Within four years, missiles will account for half of all spending on air weapons. Combat planes are losing out; their makers must shift fast to the newer weapons.

LESS BLUNTLY but no less effectively than the British did it, U. S. military strategists are switching from the manned airplane to the unmanned missile. As the chart shows, missiles are rapidly taking up more and more of the procurement budget.

The U. S. hasn't officially cut off all aircraft development as British Defense Minister Duncan Sandys did last spring (BW-Apr. 13 '57, p48). Nonetheless, the handwriting is on the wall for the U. S. aircraft industry to see. And, right about now, the industry is beginning to realize the full significance of the shift in emphasis.

• **Changing the Mix**—Assuming no important change in the international situation, dollar volume of plane and missile production in 1961 will be about the same as now—around \$7.8-billion. However, missiles' share of this spending, now less than 33%, will jump to 50%, the Pentagon predicts.

Physical volume meanwhile will decrease. Planes and missiles will be more costly but far fewer. According to Maj. Gen. David H. Baker, chief of procure-

ment and production for the Air Materiel Command, we are now producing 5-million lb. of airframes and missiles per month (the Korea peak was 11-million lb. per month). Early next year, a temporary peak of 6.5-million lb. will be reached, but then it will slide fast to 2.5-million.

Gen. Baker also warns the aircraft industry that the Air Force will narrow its buying to a smaller number of weapons systems involving fewer prime contractors. He foresees that the industry will have 50-million sq. ft. of idle floor space out of 70-million sq. ft. in 1960, compared with 20-million sq. ft. now idle out of 60-million.

• **More Selective**—Obviously, some aircraft producers will be frozen out in the narrower selection of prime contractors. And, as weapons become more specialized and complex, contractors will farm out less and less of their work (about 30% of airframe and missile production is now subcontracted).

Under the new weapons-system concept, the prime contractor is responsible for all the components of each

plane or missile he produces, instead of merely assembling the pieces the government supplies to him. He will be more inclined to keep production under his wing.

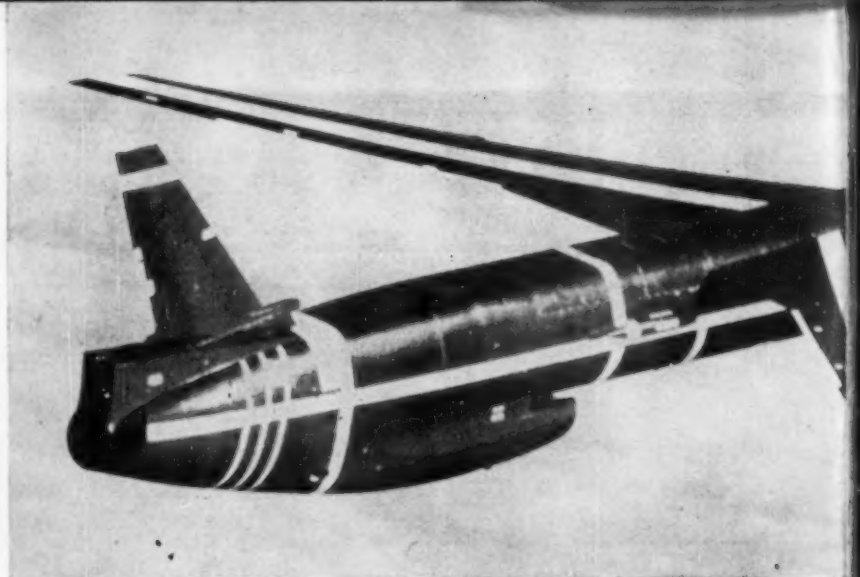
I. Cause for Jitters

Gen. Baker's speech, coming on the heels of the talks on arms control and of cancellations and stretchouts of military contracts, aroused something like consternation in the industry.

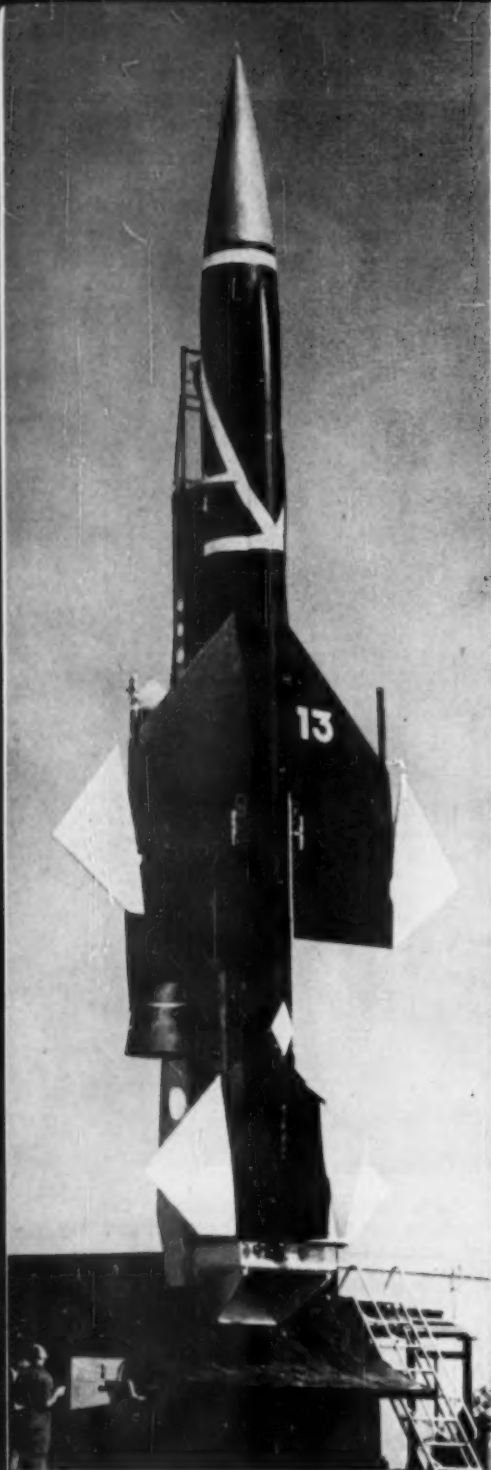
Aircraft people read it as final warning to develop the newer weapons or to diversify, else get shoved aside in the tougher selection of future contractors. They also squirm under the recognition of missiles as the primary weapon—they have been fond of arguing that there's still a lot of work for the airplane to do, that missiles aren't really just around the corner.

• **Test Flops**—Just how far long-range ballistic missiles are from the operational stage was demonstrated again this week when the Air Force attempted the first test firing of a prototype Atlas intercontinental ballistic missile at Cape Canaveral, Fla. The 70-ft. monster exploded in the air right after the take-off.

A week earlier, the Army successfully



WINGED, air-breathing missiles such as Boeing's Bomarc (left) and Northrop's Snark (above) are far ahead of development of long-range, rocket-powered weapons.



launched its smaller Jupiter intermediate-range ballistic missile after two previous failures. The Air Force has still to launch its Thor IRBM; three test-firing attempts have flopped.

Missiles enthusiasts concede that there's much to be done. Only 10 missiles are yet operational, and some of these are rather primitive. "The state of the art is not much past the stage of the wire-braced biplane," says one military man.

Yet development of missiles is stepping up under spending that rises from \$1.5-billion this year to \$2-billion next year.

• **Ready for Change**—Not all aircraft companies are prepared for the new order of things. The ones that concentrate heavily on fighter planes and those that produce for only one service (such as Republic for the Air Force and Grumman for the Navy) stand to be hurt most.

Fighter procurement will be cut back fastest and most deeply as missiles are phased in. The Air Force is dropping three fighter-bomber wings and one light bomber wing from its Tactical Air Command because of increasing capability of missiles; the Navy has 18 missile-equipped carriers, cruisers, and submarines already at sea.

Generally, however, the biggest aircraft companies have diversified and are ready to battle for the lead in missiles. They have two major problems:

- They must expand in the relatively unfamiliar fields of electronics and propulsion systems. Only 25% of the dollar value of the most advanced airplane goes into electronics, compared with 50% in missiles.

- Many existing aircraft plants aren't suitable for missile production. Missiles don't need huge, high-bayed buildings; they want air conditioning and humidity control.

II. State of Readiness

Here's how some of the aircraft companies have organized themselves to thrive in the missile and nuclear age:

Lockheed Aircraft Corp. has been careful since the war to spread its work

among the services and over a wide variety of planes, both military and civilian. It got a late start in the missile business but is now well launched, with \$75-million sales this year.

In the military field, it has the P2V Neptune anti-submarine plane and a long-range radar warning plane that's adapted from the Constellation transport. It is one of the prime contractors for the nuclear-powered bomber. Its commercial backlog is at an all-time high of \$441-million.

Douglas Aircraft Co. is also well hedged against changes. Half of its \$2-billion backlog is in commercial transports. The company has one of the oldest missile programs, dating back to 1941, and missile sales last year came to \$140-million (about 15% of total sales). Douglas is producing three missiles and developing five others. And it is working for all three services.

North American Aviation, Inc., anticipated the eclipse of fighter planes by going not only into missiles after the war but also into rocket engine production, electronics manufacturing, and atomic power plants. Its long-range diversification began to pay off this year, as the company began finishing up its F-100 fighters and got word that its F-107 wasn't going into production.

Convair Div. of General Dynamics Corp. has also distributed its eggs in many baskets: both military and commercial planes, seaplanes, and missiles. It has responsibility for assembling and testing the Atlas ICBM, and it has built a \$40-million astronautics plant. Since 1946, it has sold 1,000 of its Convair liners, and it has orders for 44 of its medium-range jet transports.

Boeing Airplane Co. was making nothing but B-29 bombers when the war ended. It is now strongly diversified, with a two-year backlog of B-52 heavy jet bombers, KC-135 refueling tankers just in production, nearly 150 orders for its Model 707 commercial



Pentagon Reins In Spending

Crackdown comes because outlays soar past budget estimates and threaten the federal surplus; it could mean canceling or indefinitely delaying billions in contracts.

A major shake-up in the fiscal 1958 military budget, starting July 1, is in the works this week. For industry, it could mean the cancellation or indefinite postponement of billions of dollars worth of procurement contracts.

This is what's at issue: The skyrocketing and unanticipated level of military expenditures—almost all in the Air Force—threatens to wipe out the slim federal budget surplus and break through the statutory debt limit.

Defense Dept. spending for fiscal 1957, now ending, will hit some \$38.5-billion—at least \$2.5-billion over the original estimate. At the current rate, fiscal 1958 expenditures will come to at least \$40-billion if unchecked, not the \$38-billion estimated in last January's budget.

• **Clamping Down**—So the Pentagon has been ordered to clamp down hard. Says one Defense Dept. official: "There'll be a lot of new faces around here next year if we spend \$40-billion." This is what's happening:

• **A spending ceiling** of about \$38-billion has been set. Each service is now studying what to do to stay within its authorized chunk of this sum—cancel orders, hold back contracts, reduce manpower, trim costs, or what.

• **Defense Secy. Wilson** will then set priorities for projects within each service and among the services. He might, for instance, order the Army to cancel a truck contract to save money to keep a higher-priority Air Force bomber project going.

Pentagon officials say it will take months to work out final details. But important preliminary decisions must be made within the next few weeks if there's to be any real hold-down.

• **Already Ordered**—The Air Force has already put into effect sweeping cut-backs in monthly output: Boeing's B-52 and KC-135, down from 20 to 15; Republic's F-105, from 20 to 16; Douglas' C-133 transport, from two to one; Martin's Matador missile, from 22 to 14; Hughes' Falcon missile, from 400 to 300; Convair's F-106, peak output of 23 monthly delayed five months; Cessna's T-37 jet trainer, peak of 27 delayed six months. An improved model of Boeing's Bomarc missile has been canceled, and the program cut.

On a Defense Dept. level, Wilson has ordered that:

• **Contract awards** across the board

amounting to \$500-million, to be let this month, be held back. This won't necessarily kill the contracts, but will delay them several months, thus postponing deliveries—and Treasury cash outlays—originally set for fiscal 1958. It will also put the damper on free-wheeling contracting at the fiscal year-end to use up uncommitted funds.

• **Overtime** for contractors and civil service employees be restricted (BW—May 11 '57, p49).

• **Running Away**—Here are some reasons why military spending is running over budget estimates: (1) Cash outlays for contracts let within the past two years are being made earlier than planned; (2) the crash program for ballistic missiles is taking increasing amounts from production funds; and (3) industrial price and wage hikes are being passed on by contractors.

But Pentagon budget experts lay most of the blame on the Air Force for what they call "partially funding" procurement programs—that is, starting production projects before enough authorized funds have been allocated by Wilson's office to carry them to the end.

To keep this in check, Wilson has issued a controversial directive banning contracts for delivery of planes and other hardgoods until enough spending authority has been granted to pay for final delivery of completed items.

• **Objection**—This is the sort of thing Pentagon budget officials object to:

Suppose the Air Force gets \$800-million to buy bombers. It commits only \$500-million in its contract with the producers to cover most of the costs.

But instead of keeping the remaining \$300-million in reserve for the next year for follow-up contracts for modifications and the like, the Air Force commits this money to start work on another producer's new fighter plane.

Pentagon budget people say this pushes spending figures well over the total budget estimates—which do not include partially funded projects.

The Air Force is allowed to buy "pre-production" items—machine tools, facilities, and certain long lead-time components—before the basic production contract is let and adequate funds to back up the total project become available. Defense Comptroller W. J. McNeil claims it has also been ordering end-items under this provision.

jet transport, gas turbine engines, the ground-to-air Bomarc missile (picture, left) ready for production, and a chemically fueled supersonic bomber under development.

Northrop Aircraft, Inc., has half its business now in missiles, including the Snark (picture, above). Failing to get advanced fighter contracts, it has developed a lightweight supersonic jet trainer, and its Ordnance Div. is making artillery equipment for the Army.

III. British Experience

With the British aircraft industry scheduled to shrink by as much as 25%, British companies are already face-to-face with problems that U.S. industry may not meet for five years.

Britain's abrupt cut-off of aircraft development doesn't end production. In fact, English Electric's P.1 supersonic fighter and the V-class of bombers (Handley Page's Victor and Avro's Vulcan) are just getting into real production. The Defense Ministry's move means only that these are the aircraft that will be replaced by guided missiles. Sandys, recognizing that Britain lags an aircraft generation behind the U.S. and probably Russia, is merely jumping over that generation into the missile era.

As a high Air Ministry official puts it: "What we have done is to decide not to have replacements for aircraft we do not yet have."

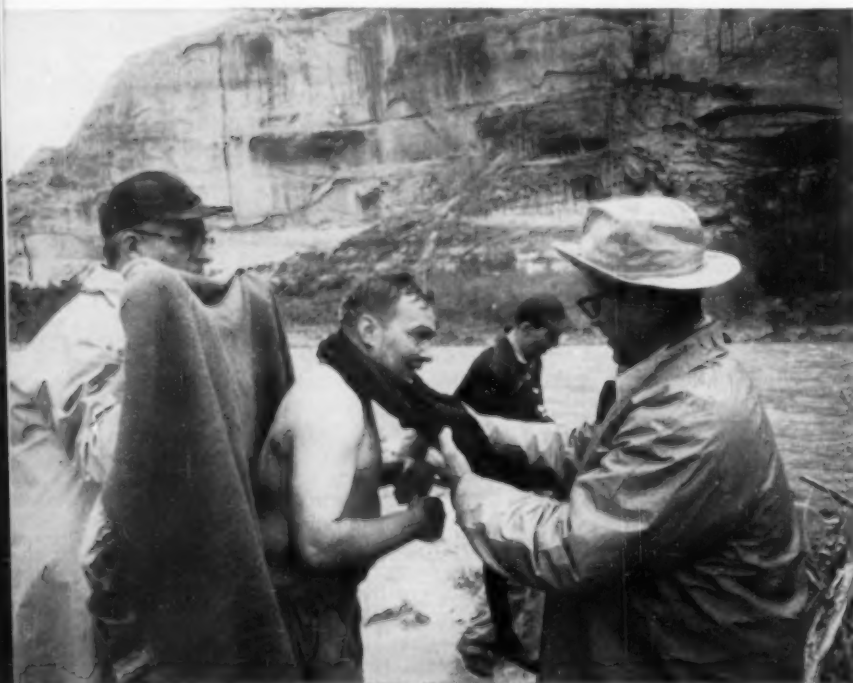
• **Export Market**—Sandys' policy makes it tough on some companies. As in the U.S., many subcontractors will be frozen out by the stress on weapons systems. But, to counter the shrinkage of the home military market, manufacturers are hoping (1) to boost business abroad in aircraft and engines and (2) to boost export sales of missiles.

Hawker, for example, is continuing to develop a supersonic fighter on its own initiative, chiefly because it feels there's a good export market.

How to Drown a Business Worry



DUNKING Frank E. Adams (left) of U.S. Steel and Elwood Lentz of Western Phosphates are "baptized" in increasingly popular sport of river running.



DRYING Maurice Horrell (left) of Bendix Aviation Corp. and John Potter of U.S. Steel give Adams a rubdown. Only casualty: Adams' glasses.

BAILING Adams and Lentz alternate in job of keeping down the water line. Rule of thumb is "Bail when you can't see the tops of your shoes."

THERE'S GOOD news for vacationing businessmen who have run the gamut of relaxing vacations from fishing Norwegian fiords to a fortnight of golf at White Sulphur Springs. The latest nerve soother is a "river run" down some of the swirling, rapids-studded rivers of the West (pictures).

River running dates back to the day when an American Indian put his birch bark canoe over the rapids, in a hurry trip to a neighboring tribe. Major John Wesley Powell borrowed the idea to explore the Green and Colorado Rivers from top to bottom. The modern pioneers of river running as a sport are Blaine Stubblefield—a fugitive from a newspaper job in Washington, D. C.—who turned a hobby into a guiding business on the rivers of his native Idaho (BW—Apr. 15 '50, p92); and Norman Nevills, of Mexican Hat, Utah, who tested the dangerous lower reaches of the Colorado.

• **War Baby**—World War II gave the real impetus to the sport. Rubber assault boats, pontoons, and life boats developed during the war made possible the running of more rivers than ever before, with less danger. At first, outdoor clubs took over with large-group junkets. Now, the trend is toward smaller groups of businessmen who for some reason find the excitement as soothing as a tranquilizer pill.

• **Travel Bargain**—River running is a





PADDLING a river run on Colorado's Yampa exercises some of the country's top industrial muscles.



CAMPING Expedition prepares to make camp on the bank of an inlet. Businessmen pitch in on chores, some discover unsuspected culinary talents.



THAWING Survivors of a dunking warm up around campfire.

comparatively inexpensive vacation. Three days on the Yampa-Green Rivers in Colorado, for example, cost from \$60 up per person. Eight or 10 days on the San Juan, also in Colorado, will come to about \$200 per person. You can tour the lower Colorado for nine days for about \$200, or spend nine days on the Middle Fork of the Salmon in Idaho for \$250. A 12-day Grand Canyon trip can be bought for as little as \$400.

• **Wide Choice**—The range of trips offers a wide choice of some of the wildest scenery in the West. There are more than two dozen rivers that offer rapid-running thrills and chills. These include the Rogue, Willamette, McKenzie, Deschutes, Metolius, John Day, Crooked, Owyhee, Grand Ronde in Oregon; the Salmon, Snake, and Clearwater in Idaho; Yampa, Colorado, Gunnison, and San Juan in Colorado; the Green in Utah; Wenatchee, Sauk, and Skagit in Washington; the Feather, Mokelumne, Klamath, Eel, Merced, and American in California; the Madison and Yellowstone in Montana.



DEEP GORGES along the route provide some of the most exciting scenery in the West. Here passengers get a few shots.

Wired Pay-TV Is the Comer

The wired system of pay-as-you-see TV—under study in the Bell System and due for full field tests soon—will be on home screens ahead of the rival scrambled method.

The furor over moving the Brooklyn Dodgers and the New York Giants to the West Coast has spread beyond the ball park fence into an area almost as controversial: pay-TV. As the teams mull the move, one important factor is the lure of revenues from showing their games over pay-TV (BW—Jun. 8 '57, p46).

From all the baseball ruckus, one important fact for pay-TV has emerged. The most recent entry in the field—wired, closed-circuit pay-TV—will probably be the first with paid-for programs on home screens.

There are two distinct—and rival—types of pay-TV:

- In wired pay-TV, a central studio is linked with TV receivers in subscribers' homes by coaxial cable or other types of lines.

- In scrambled pay-TV—which brought the issue to the public in the first place—a TV station broadcasts a scrambled signal over its regular channel. Unless a subscriber attaches a decoder to his TV set, the picture appears as a mass of wavy lines.

- In the **Ascendancy**—There are a number of reasons to conclude that the wired system now has the edge. For one thing, at least two Bell Telephone companies are interested in the method.

- Pacific Telephone & Telegraph Co. is pondering the possibility of installing cable facilities for pay-TV in San Francisco (possible future home of the Giants) and Los Angeles (where the Dodgers may roost).

- Southwestern Bell Telephone Co. is actively involved in a full-fledged experiment with pay-TV in Bartlesville, Okla., to begin later this summer.

Moreover, there has been an upsurge of promotion for the wired system, especially among former advocates of the scrambled variety. A notable example is Matthew Fox, ex-movieman active in TV film distribution and head of Skiatron TV Corp. Fox already has an agreement with Skiatron Electronics & TV Corp.—a separate company—to use its system of scrambled pay-TV. But a week or so ago, Fox proposed that Pacific T&T make pole space available for wired pay-TV lines. He has also asked city permission to wire Los Angeles for pay-TV. Fox reportedly holds a contract with both the Dodgers and the Giants for exclusive pay-TV rights to their games.

- **Other Support**—International Telemeter Co., Paramount Pictures sub-

sidary with a scrambled pay-TV system of its own, recently came out with a wired system as well. However—despite their efforts on behalf of wired pay-TV—both Fox and Telemeter insist they are ready to proceed with the scrambled systems whenever the Federal Communications Commission approves. And even if it uses the wired pay-TV system, Fox insists he will adapt scrambling equipment for use with it.

I. History to Date

Such is the latest chapter in pay-TV—a subject long on publicity, short on accomplishment.

The scrambled system was first to appear—from three companies, Zenith Radio Corp., Skiatron Electronics & TV, and International Telemeter, each with its own version. All three met immediate opposition. One problem is that the FCC hasn't decided whether to allow use of allocated TV channels for the purpose. A few weeks ago, it was expected to authorize over-the-air pay-TV tests (BW—Apr. 13 '57, p76). This fell through. FCC's latest action was to announce it had authority to permit such tests—but to ask for more information (BW—Jun. 1 '57, p96).

There has also been staunch opposition from TV networks, movie theater owners (fearful of losing first-run movies to the new systems), and movie producers.

- **Enter the Rival**—In the meantime, the wired pay-TV system was under development. International Telemeter experimented with it inconclusively in California. And Jerrold Electronics Corp., maker of community antenna equipment for areas where geography makes TV reception a problem, adapted its equipment to wired pay-TV. The system has several advantages, including the fact that FCC approval is not needed.

However, one prerequisite for wired TV is cooperation from telephone companies, which must at least agree to rent space on their poles for stringing lines. Otherwise, installation costs would be prohibitive.

But pay-TV brings problems to telephone companies, too:

- Should a company rent pole space and allow the pay-TV operator to own the system? Or should it install the system itself and rent it out?

- How will pay-TV fit in with other public services offered?

• How much capital investment will be necessary? And what should the rate structure be?

• Pole space is limited, and new lines may cost roughly \$2,200 per mile. Underground wiring ducts may run up to \$64,000 per mile.

Still, the telephone companies are interested. John M. Black, executive vice-president of Southwestern Bell, sums up: "The furnishing of communications channels of all kinds is part of our business."

II. Test in Bartlesville

To everyone concerned, the big question about pay-TV is this: Will the public pay for programs?

An answer, it is hoped, will come from Bartlesville, Okla. (pop. 19,228), headquarters city of Phillips Petroleum Co. and about to be the site of a full-scale test. In preparation, crews are stringing 38 mi. of coaxial cable for the pay-TV operator, Video Independent Theaters Co., a 230-outlet chain of movie houses.

Through a subsidiary, Vumore, Inc., Video bought equipment from Jerrold Electronics. Southwestern Bell will own the bulk of the system (all but the lead-off wires from the coaxial cable, attachments in the home, and the studio) and rent it to the operator for a reported \$1,000 per mile per month. The company emphasizes that this setup is only one way to do it.

• **Bill of Fare**—Because Bartlesville already receives programs from all three TV networks, it is considered a good town for the test. As competition, Vumore will offer 13 first-run movies per month, movie re-runs, and a program of music, weather, and news. Later it hopes to add shows such as sports events.

Bartlesville is an illustration of how wired TV can overcome some of the opposition to pay-TV systems. Movie exhibitors tend to relent when it is offered to them as a means of distributing films. And movie producers finally agreed to make first-run films available, for the test run at least.

Subscribers will pay \$9.50 per month for the program package. Other pay-TV systems may use instead the billing method favored by Fox and International Telemeter, based on programs viewed. Of a potential 7,800 homes, Vumore aims for a 3,000-subscriber minimum.

Vumore thinks six months will tell whether the experiment has been successful. If it is, the company expects to expand the system into at least 30 other communities where it has theaters. And many other companies, attentive to the tests, have been querying Southwestern Bell about establishing similar setups.

Business Spending Plans —

Plant and Equipment

Annual rate, Billions of Dollars, seasonally adjusted	1956				1957		
	I	II	III	IV	I	II	III
Manufacturing	13.45	14.65	15.78	15.81	16.12	16.84	16.42
Durable goods	6.57	7.38	8.20	8.21	8.09	8.66	8.50
Non-durable goods ...	6.88	7.27	7.58	7.60	8.03	8.18	7.92
Mining	1.13	1.28	1.26	1.28	1.35	1.27	1.27
Railroad	1.25	1.22	1.20	1.23	1.42	1.42	1.63
Other transportation	1.65	1.63	1.79	1.76	1.52	1.78	1.90
Public utilities	4.56	4.61	5.08	5.27	5.72	5.98	6.42
Commercial	10.78	11.10	10.76	11.11	10.76	10.04	10.25
TOTAL	32.82	34.49	35.87	36.46	36.89	37.33	37.89

DATA: SEC & COMMERCE

Still Gaining, But Slower

Businessmen's plans for spending on new plant and equipment head for a new record, but economists notice a definite slowing of the rate of gain.

A YEAR AGO, industry was increasing its investment in new plant and equipment at a rate of \$1.5-billion per quarter.

This year, the rate of gain has dropped down to about a half-billion dollars per quarter.

This slower pace of investment growth was verified this week by a survey of businessmen's intentions taken by the Commerce Dept. and the Securities & Exchange Commission. The survey shows that industry intends to spend at an annual rate of almost \$37.9-billion for new plant and equipment in the third quarter (table)—which would pull the first nine months of 1957 some 9% above the same period last year.

• **Earlier Look**—In itself, this is an improvement over a like survey taken three months earlier. At that time, businessmen reported they would increase investment by only 6.5% over 1956 (BW—Mar.16'57,p42).

Surveys taken by the McGraw-Hill Economics Dept., which use a slightly different sample and therefore cannot be directly compared with the Commerce-SEC findings, point to a rise of 12% for the year as a whole (BW—Apr.27'57,p41).

Chiefly responsible for the improvement is a 27% gain for utilities in the

government survey for the first nine months of 1957.

Railroads are the next largest gainers, with 22%, followed by durable manufacturing, 14%; nondurable manufacturing, 11%; and mining with a 7% gain. Non-railroad transportation shows a 2% gain.

The only loser among these major categories was commercial. A drop-off in shopping centers leads a sharp contraction in retail trade construction, resulting in a 5% decline for the category as a whole compared to the first nine months of 1956.

• **A Record, But**—All this points to a new record high for investment this year, but economists are eying the slowed-down rate of gain more than they are the totals. With investment running at an annual rate of \$37.9-billion, a half-billion gain per quarter isn't as impressive as it would have been a few years ago.

Chief concern is expressed over manufacturing, which usually gives investment its greatest push forward in times of expansion. Now, however, both durables and nondurables are only slightly ahead of the third quarter rate last year, and both show slight declines in the third quarter compared to the current quarter, on a seasonally adjusted basis.



1 IRON PUDDLER works with 15-ft. rabbling tool in front of 2,700-deg. furnace; he rolls the sticky, but not molten, iron into ball, works off slag, "physics" the iron.

Steel Takes

Country's last operating iron puddle mill, its future fate already sealed, gets nostalgic visit from Pittsburgh steelmen.

IF WAS JUST 100 years ago that the coming of the Bessemer steelmaking process sounded the doom of the strenuous and highly skilled craft of iron puddling. Yet last week, droves of today's pushbutton steelmakers and steel users, trekking to an out-of-the-way Pittsburgh industrial suburb, could still find a full-fledged iron puddle mill in laborious hand operation.

What they saw at Lockhart Iron & Steel Co., McKees Rocks, was what



2 "SPONGE BALL" is run from puddling furnace to squeezer for first finishing step; it comes out 8 in. in diameter, 2 ft. long.

a Look at its Fast Vanishing Past

you see in broad outline in the pictures—the process of making the crowning achievement of the puddler's craft, triple-refined puddled wrought iron. Lockhart's is today the only mill left that puddles iron in North America.

• **Lost Youth**—The outing was staged by Lockhart actually to show off a handsome new addition to its steel warehouse, with racks bulging with products. But as bait for centennial-conscious steelmen, Lockhart played up the puddle mill and the fast-disappearing hand-mills that form its product.

Industrially speaking, the affair was nostalgia run riot. Probably not one in 10 of the 500-odd guests had ever seen an iron puddling operation before. Yet probably there wasn't even one in

20 who didn't feel that here was part of his youth—albeit a somewhat irresponsible youth in the light of today's experience, what with hand labor everywhere, wheelbarrows, a steam engine, and a rope-drive mill.

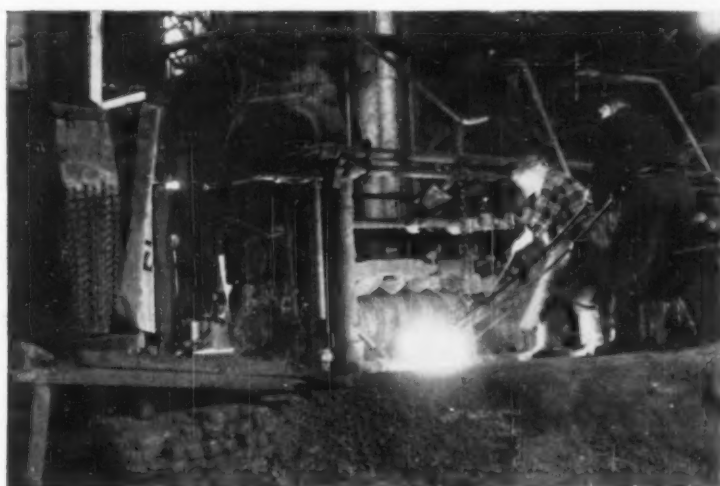
• **Dim Future**—How does the operation survive? The answer, probably, is just barely. The triple-refined product is used today only for stay-bolts on steam locomotives—where prolonged high temperatures and severe stresses would wear out steel sooner. So the only customer left is the Norfolk & Western Ry., with occasional orders from other roads. The stuff sells for \$400 a ton. That sounds like a lot—but when you figure in the many steps and repetitions, and the high hand

labor cost, you wonder it's not more.

Lockhart also makes double- and single-refined wrought iron, widely used for chains and other corrosive applications. Even there, its market is shrinking—because if you want wrought iron, there are cheaper ways to make it.

But that's not all that's heading the puddle mill for extinction. Most of its 25 puddlers are old; and when they're gone, there'll be none to replace them. Lockhart tried training more, but young men don't like the heavy, continuous, work—or a trade with one employer.

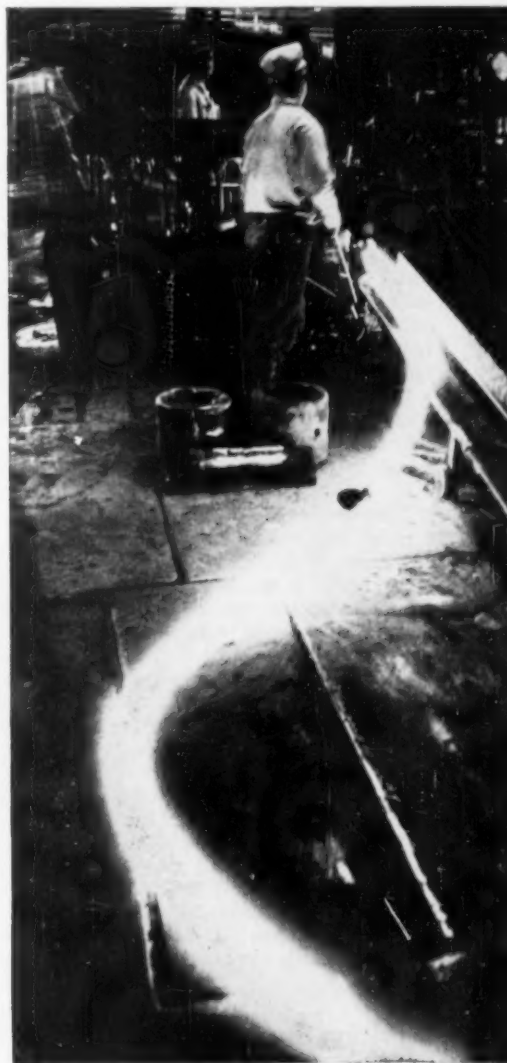
At the moment, though, a third prospect of shutdown is more ominous—that's Allegheny County's hard-boiled smoke-control law, which a puddle mill finds almost impossible not to violate.



3 MUCK MILL. Squeezed "bloom" (from squeezer at left) is worked back and forth to form heavy "muck bars"; these are re-refined or go on to next step.



4 REHEAT FURNACE. Muck bars are rolled into flats, cut into 40-in. lengths, wired together into "piles" of flats that are being fed into furnace here.



5 ROD MILL. End of line; out of it come finished wrought iron rods.

How Much More for Steel?

● Few in the industry will even guess at the price boost scheduled for July. But it's a foregone conclusion that it will be upwards of \$7 a ton.

● A last-minute complication is the c-of-l pay boost that falls due July 1. It may be 4¢ an hour instead of the 2¢ or 3¢ anticipated by steel companies.

● But if U.S. Steel leads the way, any price hike won't do much more than recover actual costs.

That annual late-spring guessing game—how much will steel prices rise—is in full swing this week. These developments, all of them predictable, are taking place:

- Steelmen who will guess at all are guessing higher than they expect to get—\$8.50 per ton on up.

- Congress is threatening to—but doesn't—investigate.

- U.S. Steel, which will set the price on or very shortly before July 1, is saying not one word as yet about its own plans.

As a result, what was predictable eight weeks ago (BW—Apr. 20 '57, p44) remains true this week: Steel base prices will rise, July 1, upwards of \$7 per ton on the average. But no one, including U.S. Steel, knows now what the average increase actually will be.

- **C-of-L Shock**—Steelmen were shocked a couple of weeks ago when they saw the April cost-of-living index as published by the Bureau of Labor Statistics.

They had expected it would rise to a point that would make it necessary for them to grant a c-of-l pay rise of at least 2¢ an hour and perhaps 3¢. This boost would be payable starting July 1. It would follow an earlier one of 3¢ that fell due last Jan. 1 as a result of the index's move upward last November.

But the April index was higher than expected. It shot up to 119.3, which would require a 4¢ hourly pay boost. If the index held steady through May, the governing month, then steel will be on the hook for double what it originally hoped for and a third more than it had resigned itself to. So, automatically, a 4¢ boost would make earlier guesses on the size of the steel price increase a little on the conservative side.

I. Pricing Problem

To rationalize steel's pricing problem, you start with the realization that

steelmen consider their profits insufficient to do the job they must do, namely:

- Provide substantial retained earnings for reinvestment.

- Attract capital.

- **Narrower Margin**—You can make a pretty persuasive case that steel profits, in spite of all the price increases, aren't high enough. That looks particularly true of 1959 and later, when steel's heavy cash flow from accelerated amortization will all but end as the five-year amortization period on much of their expansion runs out.

At that point, of course, profits will bounce up smartly. But so will federal income taxes. The result: distinctly less cash with which to continue the job of steel expansion, which then will pretty much be on a 3-million-ton-per-year basis.

So, next month, the industry must recover all its costs. Second-year total employment cost increases under the three-year, no-strike labor agreement signed last summer were estimated then by steelmen at about 18¢ per hour. (The United Steelworkers estimates direct second-year wage costs at 12.5¢.) The BLS cost-of-living index already has reached the point at which 7¢ will have to be added to last summer's employment cost estimates, which indicates an employment cost increase of 25¢—of which 3¢ has been paid since Jan. 1.

II. How Much?

Now you face a choice. Recently, Roger M. Blough, chairman of U.S. Steel, said his company's costs would be raised, July 1, "better than 20¢ per hour." Assume that means 21¢ and multiply that by U.S. Steel's last published total manhours (21) per product ton. That raises the employment cost of the price leader by \$4.41 per product ton next July 1. Double that, on the basis that each added penny of wage costs generates an extra penny of accom-

panying non-wage costs, and you get \$8.82.

- **Extreme**—That's pretty extreme. U.S. Steel's manhours per product ton were up last year because of the five-week strike. Also, it has been spending heavily to raise productivity. Only the Corporation knows how many manhours it'll need to ship a ton of salable product this year, but it will work out to less than the cost increase of \$8.82, which mere application of a formula would suggest.

Industrywide, it works out this way. Figure the total employment cost increase at 25¢. Multiply that by 15 manhours per product ton, the industry's 1956 performance. That raises employment costs by \$3.75, which doubles to \$7.50.

So, if steel will have to recover a little over \$7 per ton next month just to stay even, the question arises: How much more will it take?

III. U.S. Steel's Position

Chances are, since U.S. Steel is the price leader, the price boost won't be very much, if anything, more. U.S. Steel isn't a bit happy with the annual procession of price increases steel has been making.

- **Body Blow**—Last year, the industry took a long strike to win a three-year, no-strike contract. At least to U.S. Steel, that meant a chance to operate continuously, to improve its plant, streamline its methods, and get its productivity up. It hoped, also, to get its costs stabilized at predictable levels—a hope that is being knocked in the head by two consecutive cost-of-living increases.

U.S. Steel, at least, has shown no disposition to give up on its three-year program merely because its cost increases haven't been stabilized. It still has a year and a half of heavy cash generation from accelerated amortization, and it hasn't yet taken full advantage of the accelerated depreciation made available under the 1954 Revenue Act. The company's first-quarter earnings were up nicely, and 1957 isn't going to be a poor steel year, even though the operating rate will be sagging for another 60 days, at least.

So, if you assume that U.S. Steel even begins to mean what it has been saying so diligently for so long—that there's a better way to finance steel expansion than merely by raising prices—you can anticipate that the company won't be trying next month to do much more than recover its costs. But the wise steel buyer won't expect it to give anything away.

Automation: friend of the workman

FROM the days of painstaking weaving by hand to today's highly automatic loom that makes 7 inches of cloth a minute, every step toward automation has been fought as "an enemy of the workman." And every such step actually has proved the workman's best friend, paying him more and more real wages, making possible for him better living and greater security.

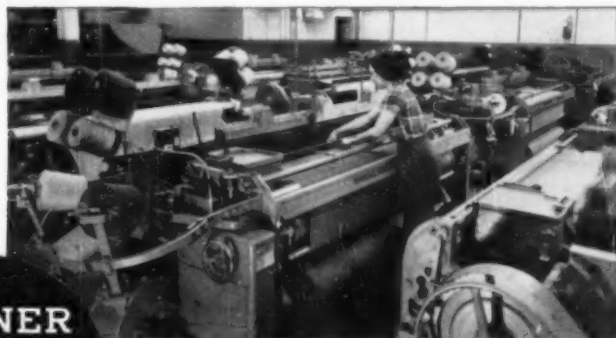
Would steel workers like to go back to the 10 to 14 hour day, the dangerous, back-breaking hand mill, and \$2 a day instead of \$3 an hour? Would farmers welcome cultivating by hand hoe?

The farmer, the steel worker, the weaver, every-

one, gets paid out of what he produces. There's no other place for it to come from. So, the more a man produces, the more he can be paid. And the better his machine and the better he uses it, the lower the *price* of his product can be, which means more will buy it and so the more secure his job will become.

And don't worry about being over-produced. Until every legitimate human want is filled, we can't be over-produced. The only thing to fear is to be *over-priced*—and that comes from old machines, poorly used.

The best workman at the best machine is always in demand.



High quality worsteds being woven on Warner & Swaseys

**WARNER
&
SWASEY**
Cleveland
PRECISION
MACHINERY
SINCE 1880

Canada Votes In a New Regime

Conservatives' surprise victory produces a weak government with fewer economic and political ties to the U.S.

This week, in an election as surprising as the 1948 Democratic victory in the U.S., Canada overthrew the 22-year-old Liberal Party administration of Prime Minister Louis St. Laurent—the party of such well known internationalists as industrialist C. D. Howe, Minister of Trade & Commerce, and Lester B. Pearson, world diplomat and Canada's External Affairs Minister.

The winner of the majority of seats, but not of enough to control Canada's House of Commons, is the Progressive Conservative Party headed by 61-year-old Saskatchewan prairie lawyer John Diefenbaker, a political unknown outside of Canada.

• **Political Setup**—There are bound to be repercussions on U.S.-Canadian economic and political relations. As a result of the election, the Dominion now seems in line for a government:

- Oriented more to the United Kingdom than the Liberals were.

- Less sympathetic to U.S. business interests.

- Completely inexperienced and unprepared for office.

- Politically unsteady and dependent on making deals with the Dominion's two splinter parties—the Cooperative Commonwealth Federation (Socialist), and the right-wing Social Credit Party.

- **Foreign Policy**—The traditions of the Canadian Conservative are for strong ties with the United Kingdom. The announced visit of Queen Elizabeth II to Canada this fall—her first to the Dominion as its Queen—may be the occasion for a new Conservative government alignment of Canada to the U.K. It's known that a part of the protest vote centered against the Liberal "do nothing" policy when Britain got into trouble at Suez last fall.

There has also been increasing criticism of Canada's "go slow" policy on recognition of Communist China, a feeling that the Liberal regime should have sided with British recognition, rather than with U.S. non-recognition.

- **Canada-Conscious**—Much of this criticism comes from Canadian businessmen, and their American counterparts are wondering what will happen to key Canadian-U.S. economic and political relations, and to vital investment prospects in the Dominion.

While there won't be any Latin

American-style nationalism, many of the up-and-coming younger members of the newly elected Conservatives are already successful small businessmen, Canadian corporation executives, and are strongly "Canada conscious." They will be all-out for Canadian business—now standing on its own feet as never before. Their regime could make legal decisions that would require thousands of Canadian subsidiaries of U.S. companies to issue annual statements, include more Canadian investors, put more Canadians on company boards, and operate as Canadian concerns in all but name.

- **Blurry Picture**—The future of a Canadian government hasn't looked this confused in many years. The Tories won only 110 seats (it takes 134 seats to control Canada's 265-seat Parliament) an increase of 159 seats over their previous total, but still 24 short of the needed majority. The Liberals, who dominated the old Parliament with 170 seats out of the 265, dropped to 103, of which 62 are in French-speaking Quebec. The remaining 52 seats went to CCF, Social Credit Party, and some independents.

The inability of the newly powerful Conservatives to control Parliament means they must seek some deal with the two "splinter" parties, or go to the country in another general election. For the first time since 1921, the formation of a working Canadian government may lie in the hands not of the two major parties, but of the splinter groups whose allegiances must still be won to form a lasting administration. Right now, CCF and Social Credit leaders say "no deals," but no one expects this attitude will last. St. Laurent's announcement that he is not going to drag things along is interpreted as a hint that he is ready to turn the government over to Diefenbaker.

- **How—And Why?**—The Conservative sweep came as such a surprise that most Canadians are still too dazed to try to figure out the hows and whys. Most agree, however, that a huge protest vote against the Liberal Party did it. The Liberals have been in power too long, have made too many enemies, had publicly boasted that their long experience in running the show was "indispensable" to a booming Canada.

Several key factors, almost all of them associated with domestic issues, probably capsize the Liberals' boat:

- The increasingly "strong arm" methods the Liberals used against a small opposition in the previous Parliament. This came to a head last June during the highly controversial debate on the Trans-Canada Pipe Lines' bill



Louis St. Laurent
Chief of ousted Liberal Party



John Diefenbaker
Head of victorious Conservatives

debate (BW—Jun. 2 '56, p. 36), when the government resorted to "closure"—the guillotining of debate—to ram its bill ahead. Many Liberal cabinet ministers, including C. D. Howe, incurred bitter opposition in the country during the debate.

- Probably most of all, the Canadian electorate felt that after 22 years the government had been in too long for a democracy, that it had made too many mistakes in its foreign policy (the loosening of ties with Great Britain, for example), in its domestic economic policies (increasingly tight money), in social services (its refusal to increase low old-age pensions and veterans' allowances).



Atoms for peace in this new Calumet & Hecla uranium find

Here's one of the first samples of uranium ore . . . a handful of potential power . . . taken from one of Calumet & Hecla's New Mexico properties where the ore body, after being blocked out by extensive drilling, is being developed for mining.

After all, it's only a step from mining copper to mining uranium. True, it's a step that requires a special know-how, a pioneering spirit, and considerable courage coupled with sound thinking and planning. And that, of course, is a combination of qualities that has characterized Calumet & Hecla since its beginning nearly a hundred years ago.

But mining uranium and copper is just one of the important activities of this diversified company. Throughout its various operations . . . manufacturing, forestry, copper fabrication, wood products, as well as mining . . . you'll find tangible evidence of the sound management, and progressive thinking that insure successful operation.

**Calumet &
Hecla, Inc.**



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TUBE DIVISION • FOREST INDUSTRIES DIVISION • GOODMAN
LUMBER COMPANY • CALUMET & HECLA OF CANADA LIMITED
• CANADA VULCANIZER AND EQUIPMENT COMPANY LIMITED

In Business

• • •

ICC Blesses Pennsy-Santa Fe Rule Of Rail Bypass Around Chicago

The Interstate Commerce Commission this week set the seal of its approval on joint ownership of the Toledo, Peoria & Western RR by the Pennsy and the Santa Fe. The Western's 234 miles of track give the two big carriers a bypass around Chicago.

In O.K.'ing the deal, the commission rejected applications for equal partnership by the Chicago, Rock Island & Pacific and the New York, Chicago & St. Louis. It also turned down an application for sole control of the Western by the Minneapolis & St. Louis.

The way is now clear for the Santa Fe to buy—for \$12,150,000—all 90,000 shares of Western stock, of which 82% are held by the estate of George P. McNear, president of the Western from 1927 to 1947. The Pennsy will then buy half of the shares from the Santa Fe.

• • •

North Carolina Cuts Income Tax, So Titanium Plant Will Move In

Allied-Kennecott Titanium Corp. this week announced it would build a plant at Wilmington, N. C.—just four days after the North Carolina General Assembly approved a slash averaging one-third in the state's hefty corporate income tax.

In urging approval of the cut—proposed by a Tax Study Commission—Gov. Luther H. Hodges told the Assembly it would give the state a chance to land a big new industry. And Allied-Kennecott now admits that the tax cut was a determining factor in locating the plant for titanium forgings and billets.

The tax cut, along with other pluses, including ample cool water, finally outweighed the lower power and transportation costs offered by competing sites in the Ohio River valley and upstate New York.

Allied-Kennecott is owned in equal shares by Allied Chemical & Dye Corp. and Kennecott Copper Corp. It will concentrate on the civilian market along the Atlantic seaboard, rather than on sales to the military.

• • •

Canadian Ore Deal Gives Javelin Cash, Pickands Mather a Lot of Iron

Pickands Mather & Co. of Cleveland last week cut itself a huge slice of the premium iron ore deposits at Canada's Wabush Lake. And Canadian Javelin, Ltd., got a nice fresh batch of money to help develop its own mines. Here are the terms of the complex deal:

- Pickands Mather and Steel Co. of Canada will lease and operate a 5-sq.-mi. tract of the Javelin concession

in the Labrador ore field, through Wabush Iron Co., Ltd. in which Canadian Javelin has a 10% interest. PM and Stelco, already in accord to work part of the tract (BW—Oct.20'56,p36), will put up the needed cash, and will try to interest other U.S. companies. PM gets an option to develop at least one other field in the area.

- Canadian Javelin gets \$7.2-million from Wabush Iron, as reimbursement for land, equipment, and exploration, plus a 90% interest in the 37-mi. railroad linking Wabush Lake to tidewater at Seven Islands. Most of the cash will go into developing Javelin's Lake Julian mine, scheduled for 1958 production at an eventual 6-million tons a year. Canadian Javelin will also get a fat royalty on ore shipped by Wabush Iron.

• • •

General Shoe, Expanding Out of Shoes, Buys Henri Bendel Specialty Shop

General Shoe Corp., a big manufacturer and retailer of shoes, this week plunged deeper into retailing. It bought 100% control of Henri Bendel, posh New York specialty shop, and installed its own Ben Willingham as president.

Thus General, slowed down by a consent decree in its expansion in the shoe business (BW—Feb.25'57,p32), is branching out in other ways. It already has 65% control of Hoving Corp., which in turn owns Bonwit Teller and has something like a 52% interest in Tiffany. General also owns Whitehouse & Hardy, a high-fashion men's chain, Frank Bros., and I. Miller, which operated Bendel's shoe department.

Stockholder trouble may be brewing for one of General Shoe's interests. Bulova Watch Co., which owns a big minority slice of Tiffany, is demanding to see the jeweler's books. Bulova wants to know whether there is ground for a stockholder suit against the pre-Hoving management of the store, based on an earnings record that Bulova describes as "incredibly bad."

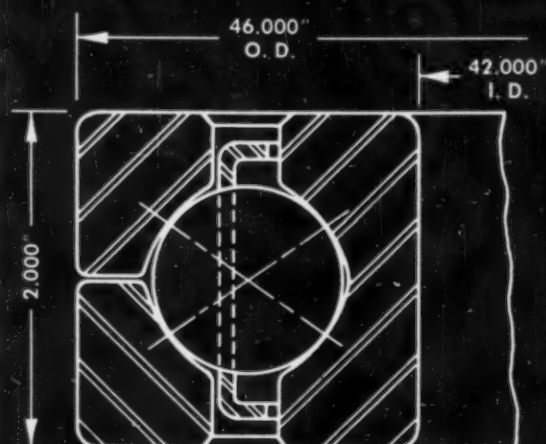
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Business Briefs

There will be no 1957 replay of the **National Automobile Show**, which came to life in New York last December after a 16-year lapse (BW—Dec.8'56p36). No suitable date could be arranged this year, but there might be an autumn revival in 1958.

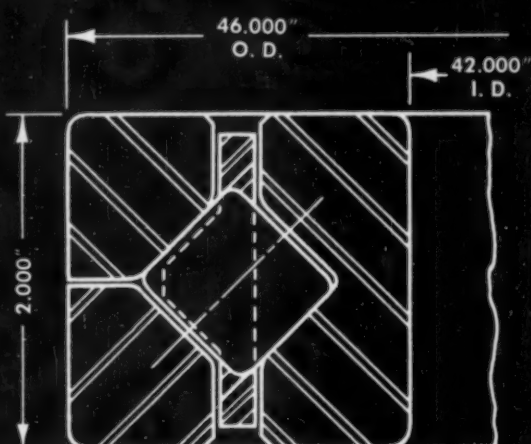
The average investor in a closed-end fund is middle-aged and fairly well heeled, says the National Assn. of Investment Companies. A survey showed an income of around \$12,200, a stock portfolio of \$66,000, and \$9,270 in closed-end funds.

Economic indicators: The Veterans Administration says that May **homebuilding proposals** under the GI program were the lowest for the month since 1952, and 14.4% below the April figure. . . . The Commerce Dept. says **April sales by manufacturers, wholesalers, and retailers**, seasonally adjusted, were \$55.5-billion, down \$200-million from March.



BEARING SIZE — 42" x 46" x 2"
 ROLLING ELEMENTS — Balls
 SIZE OF BALLS — 1 1/8" diameter
 NUMBER OF BALLS — 94
 CAPACITY AT 10 RPM:
 RADIAL — 104,800 lbs.
 THRUST — 300,000 lbs.

4-Point Contact Ball Bearing



BEARING SIZE — 42" x 46" x 2"
 ROLLING ELEMENTS — Rollers
 SIZE OF ROLLERS — 7/8" x 7/8"
 NUMBER OF ROLLERS — 120
 CAPACITY AT 10 RPM:
 RADIAL — 73,700 lbs.
 THRUST — 226,000 lbs.

Bi-Angular Roller Bearing

SURE we make both, but we recommend only one

Yes, Kaydon manufactures both — 4-point contact ball and bi-angular roller bearings in the same diameters and widths. BUT — we would in almost every instance recommend the former. Why? Because our field application reports consistently prove that the 4-point contact ball bearings are better for most applications than the lower capacity bi-angulars (*See capacity figures in drawings above.*)

Another important difference between the two

bearings is that the 4-point contact ball bearing is *not limited to low speeds*, whereas the bi-angular normally should not be used above 10 rpm and usually is suitable only for oscillation. Then, too, the torque in the 4-point contact ball bearings is generally much lower.

Kaydon's unbiased recommendations result from years of bearing design, application and manufacturing experience with *all types* of ball and roller bearings up to 124" in diameter. So, why not contact Kaydon first?

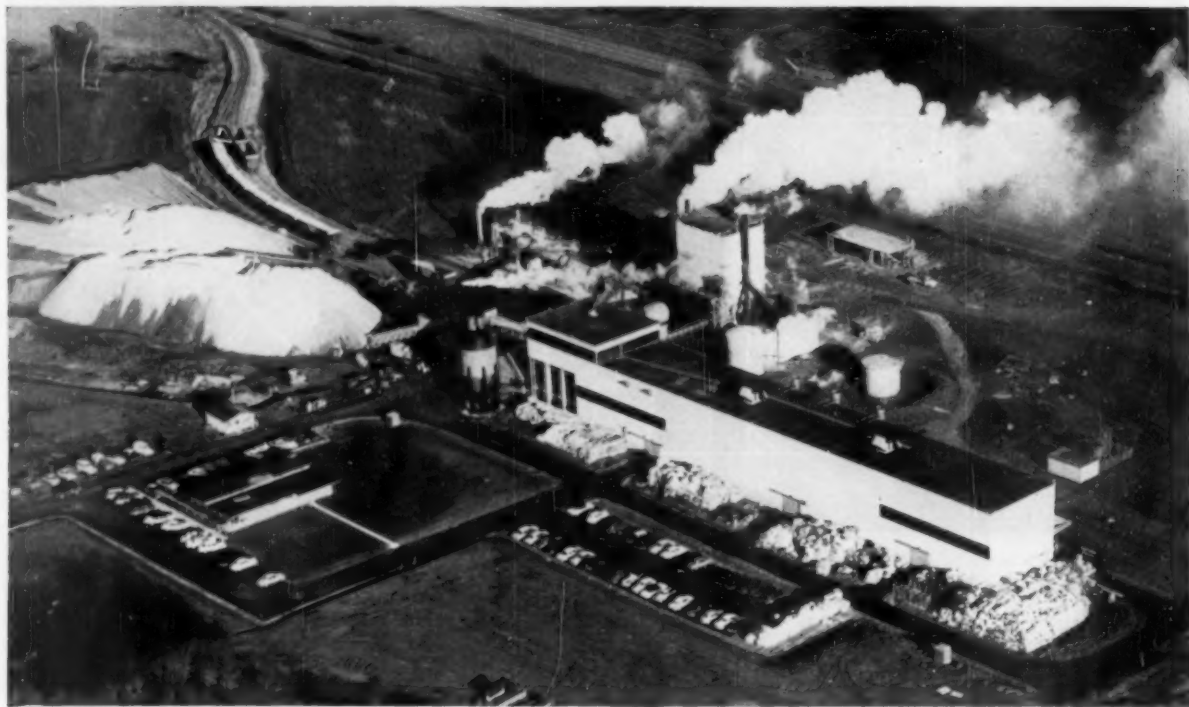
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K-563

All types of ball and roller bearings — 4" inside diameter to 124" outside diameter... Taper Roller • Roller Thrust • Roller Radial • Bi-Angular Roller • Spherical Roller • Needle Roller • Ball Radial • Ball Thrust Bearings

At this new Western Kraft plant...



— as in the selection of a plant site,
efficiency determined the choice of
JENKINS VALVES

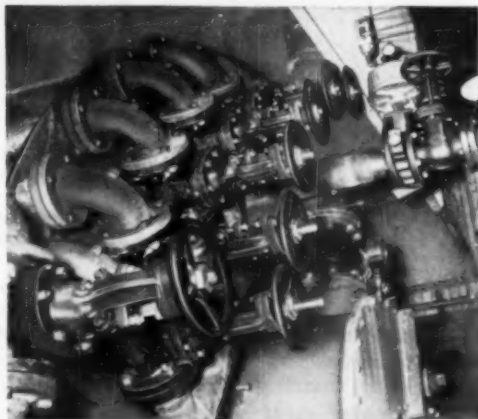
It hits you even before your tour through the new Western Kraft Corporation plant begins. *Efficiency.* From forest to finished product, here is efficient operation in the manufacture of high-quality kraft paper.

The plant site — a 100-acre tract near Albany, Oregon — was selected primarily because of its central location in relation to the supply of wood chips from the surrounding timber areas.

All operating equipment was chosen with the same foresight, on the basis of proved ability to do its job to perfection. When it came to valves for controlling processing and other piping, an experienced management, architects, engineers and contractors quickly wrote the specification . . . "JENKINS".

No other valves have such a long record of efficient, economical performance. The Jenkins Diamond on a valve has been a mark of extra value, trusted by building experts and plant operating men for nearly a century. Valves that bear this famous mark cost no more. Jenkins Bros., 100 Park Ave., New York 17.

*Consulting Engineers and Architects: SANDWELL & COMPANY,
Vancouver, B. C.
General Contractor: HOFFMAN CONSTRUCTION CO.,
Portland, Ore.
Mechanical Contractor: HOFFMAN ENGINEERING CO.,
Portland, Ore.
Plumbing Contractor: VERN COLLINS PLUMBING CO., Salem, Ore.*



Manifold of Jenkins Nickel Iron Gate Valves on the liquor washers controlling the showers.

JENKINS
LOOK FOR THE JENKINS DIAMOND
VALVES



Sold Through Leading Distributors Everywhere

WASHINGTON OUTLOOK

WASHINGTON
BUREAU
JUNE 15, 1957



Eisenhower faces an even bigger budget problem next year.

While Congress is hacking away at the Administration's \$71.8-billion spending schedule for the 12 months starting July 1, the Administration is busy with preliminary calculations on the budget that will be sent to Congress next January. The tentative totals show that, despite budget cuts now being voted, spending will take another big upward jump next year unless the Administration takes drastic action to reverse the trend.

A \$76-billion budget is in prospect. That would be the budget for fiscal 1959—the 12 months starting July 1, 1958. And it would mean a rise of \$4.2-billion over the budget proposed for fiscal 1958. What's more, the preliminary figuring indicates that failure to set the spending brake now might well result in yearly budget rises for the remainder of Eisenhower's second-term Administration.

This further clouds the outlook for tax relief. A cut in 1958, at least for individuals, is a pretty good bet if spending can be leveled off in the \$71-billion to \$72-billion range. A rising business level would provide a pretty comfortable surplus out of which taxes could be cut. But if spending is allowed to go to the \$76-billion level, tax relief will be in doubt.

Note the political shifting on tax reductions. The Administration, dead set against any action this year, is trying to get in position to back a tax cut next year, ahead of the Congressional elections. The Democrats, once hot for voting reductions to take effect next January, are backing off. The Mills Joint Economic subcommittee hearings are making a case that taxes shouldn't be cut while business is good and the surplus is small. Odds now are that the Democrats will wait until next January before setting their policy line. If budget spending goes way up at that time, they may even take the position that tax relief must be postponed until the "spendthrift Eisenhower Administration" ends. In a Congressional election year, both parties will be playing for advantage on the tax issue.

Watch for new economy moves by Eisenhower. He's disturbed by the trend and will insist that agencies and departments hold down next year.

The Pentagon is already making a start. It has flatly ordered an expenditure ceiling, which means that manpower and procurement of weapons will have to be cut by \$2-billion to stay within a \$38-billion ceiling (page 43).

Other moves are under consideration. Federal public works programs will be stretched out. In some cases, starts will be delayed until the budget picture improves.

The Democratic attack on tight credit will get going next week.

Retiring Treasury Secy. Humphrey will get a going-over. Democrats on the Senate Finance Committee plan to keep him in the witness chair for the best part of a week. The line will be that he has backed the Federal Reserve Board in its moves to make credit harder to get, with the result that the cost of carrying the huge national debt has been pushed higher and higher, at the expense of the taxpayers.

Then will come Chmn. Martin of the Reserve Board. He's a Truman

WASHINGTON OUTLOOK (Continued)

WASHINGTON
BUREAU
JUNE 15, 1957

holdover, but that won't protect him from the political charges that tight money has hurt farmers, home buyers, and small business while pushing up the incomes of investors in government and corporate bonds.

—•—

You may see another political row over the debt ceiling.

Administration intentions still aren't clear. But Congressional quarters expect the Treasury to ask another one-year extension of the \$278-billion ceiling—\$3-billion more than the limit that will become effective after June 30 unless Congress acts.

Congress will probably vote the higher level, if the Treasury asks it. But Democrats will take advantage of any such request to call new attention to Eisenhower spending plans and the fact that the Republican White House hasn't been able to cut the debt as it hoped to do.

—•—

Congress will try to write a new farm program next year.

Note the Senate vote to put back soil bank funds, killed earlier by the House. Prospect is that the House will accept the Senate restoration, which will continue payments in 1958 to farmers who take land out of production. Neither party is satisfied with the soil bank. It's expensive. The production cuts it achieves are costly to the taxpayers. But neither party wants the responsibility of killing this subsidy system until some alternative can be voted. Both sides will try to come up with a new program next year—a Congressional election year.

—•—

Eisenhower will drop back to his old schedule, as a result of the stomach upset this week. Doctors blame the brief illness on food—the fact that Eisenhower had become a little careless of his diet. But White House aides note that the President's trouble came after two weeks of stepped-up activity, with the President taking on vexing problems that he had been heretofore inclined to ignore and let drift.

Look at the past week—the schedule preceding the upset stomach that produced stock market jitters here and abroad.

Here's how the President's schedule ran:

Monday—Cabinet meeting and a box lunch with GOP members of Congress. The President doesn't like the business of playing politics—fence-mending—and besides, he ate an extra piece of chicken—off his diet.

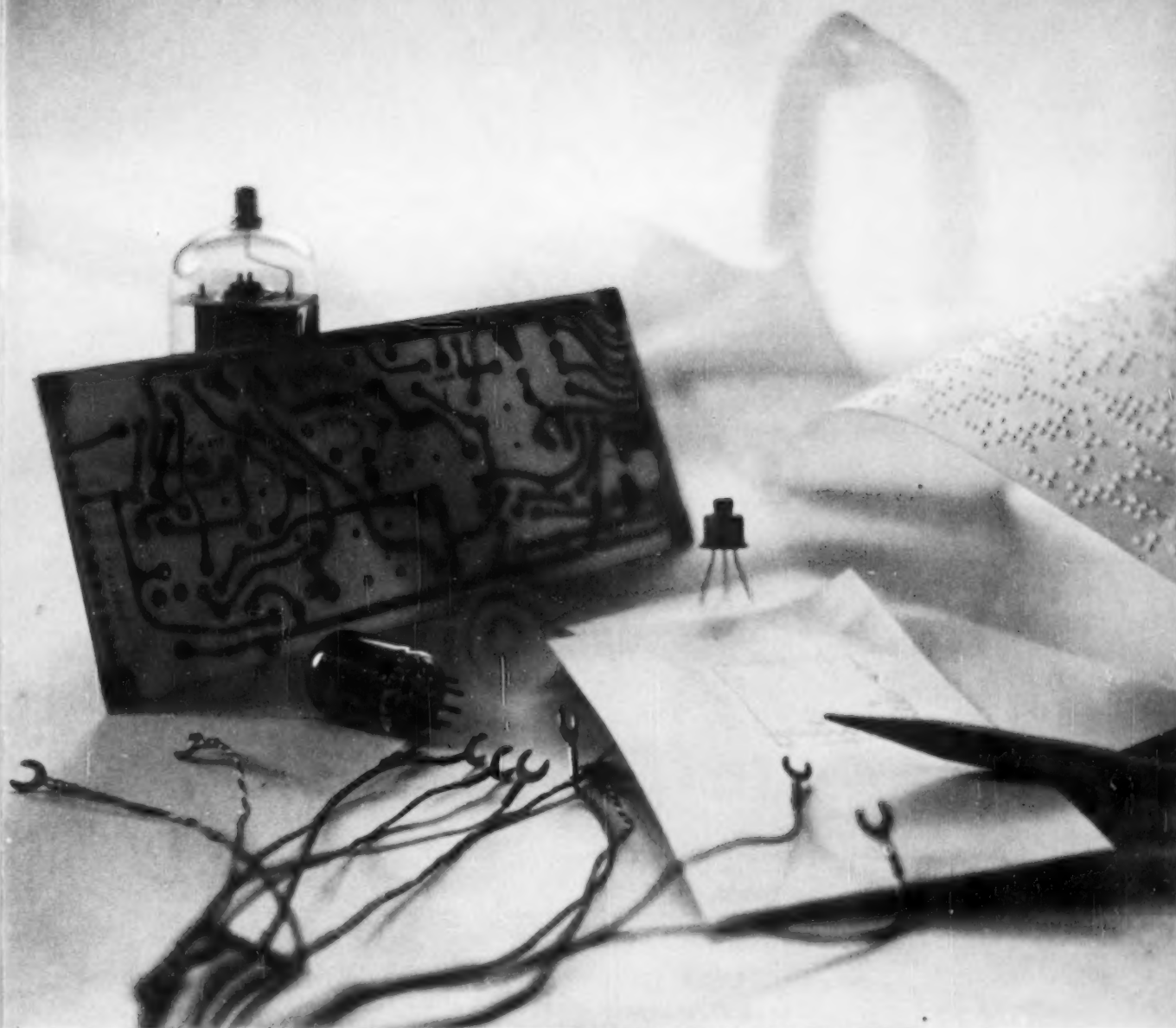
Tuesday—More politicking, first with GOP Congressional leaders on the legislative plans and then with party chairman Alcorn and other party heads. Then, 18 holes of golf at the Burning Tree Club.

Wednesday—News conference as a start, with tough questions on weapons-testing, China trade, Girard case in Japan, etc. Eisenhower looked well and defended his positions with what some reporters called a "fighting spirit."

Thursday and Friday—Aboard the Saratoga, watching the Navy show off. But he had other business, too. Secys. Dulles of State, Wilson of Defense, and Humphrey of Treasury were with him. The ship's rich food tempted him.

Saturday—Back in Washington, golf (18 holes on a wet, chilly morning), and lunch at Burning Tree.

Sunday—Mostly quiet, but a brief speech and honorary degree a few miles away from the White House at American University.



ELECTRONICS

Another Industry where General American works

Yesterday's "impossibilities"...the automatic factory, the signal-sending satellite, the radar range, the time-conserving computer...are here today, mainly as a result of electronic progress.

Taking part in these electronic "miracles", General American specialists develop new nickel coatings to

make aluminum components solderable, produce better "printed circuits"...and mold plastic cabinets of complex shapes to house these units. They design safety-motion switches and electronically operated conveyors to speed production...make fasteners for quicker assembly. The solvents and liquid chemicals used by the elec-

tronics industry are transported in GATX tank cars...are stored in General American terminals.

In research and development, in handling, storing, and marketing, General American experts are ready to apply their experience to *your* problem. Call on them. You'll find... *it pays to plan with General American.*

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Now...changing a ribbon is so clean and easy you can do it with white gloves on!

New Royal Twin-Pak ribbon comes rolled in two cases. Nothing to wind! Nothing to thread!

It's a snap! Lift out the old Twin-Pak... drop in the new. No more smudgy fingers!



ROYAL announces a brilliant new typewriter!

Exclusive features include Twin-Pak, the clean and easy ribbon changer that takes the dirty work out of office typing

Never before has a standard office typewriter offered you such brilliant typing speed and letter-perfect results.

New Twin-Pak makes ribbon changing so easy, you're assured of always getting a sharp, clean impression. Happier secretary, too.

And Royal's new "brilliant action" keeps her fingers flying relaxed all day long... because the touch is a good deal lighter... tailored to each finger.

Fact is, just about everything goes

faster, quieter and a good deal easier with this brilliant new Royal.

And those fashion-styled Royal-tone colors help to brighten up your office, cut down on tiring eye-glare. Your choice of Cameo Pink, Sea Blue, Willow Green, Sandstone or Pearl Gray.

INTERESTED?

Discover how this brilliant new Royal will improve your typing production. And a girl's morale. Call your Royal Representative for a free office trial.



ROYAL

standard typewriter

Product of Royal McBee Corporation, world's largest manufacturer of typewriters

MARKETING

Produce Mart Gets Elbow Room

Philadelphia's quaint but overcrowded Dock Street will expand into a big food distribution center in another part of the city.

COBBLE STONES, ancient buildings, a pile-up of trucks, horse-drawn carts, and food cases make for a certain quaint and untidy charm. But the 100-odd food wholesalers who cram Dock Street (pictures) in South Philadelphia take a dim view of quaintness. They are overdue for something more. They are going to get it: a spanking new \$100-million food distribution center—the most ambitious program of its kind a city has yet undertaken.

When the new center (map) is finished, it will house not only the Dock Street merchants, but meat and dairy product wholesalers, food packers and processors, packagers, and allied industries. The aim is to make Philadelphia a major food distribution point for the East Coast area.

• **Blight Area**—When Dock Creek, a serpentine stream that empties into the Delaware River, was adjudged a menace to Philadelphia's health and was paved over, the wide paving attracted merchants in search of a market place. That was in 1784. In the intervening years, the district has developed into one of the city's worst blight areas. So the city government is preparing to condemn it all over again—this time on the surface. Dock Street's marketing days are numbered.

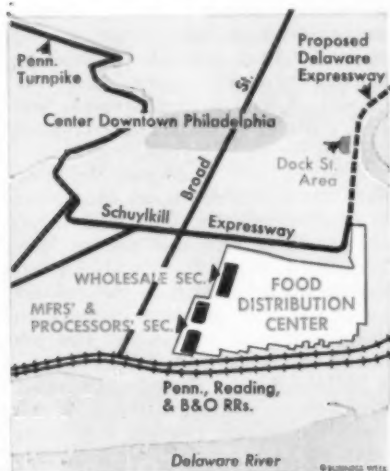
• **A City Pattern**—The situation of the Dock Street merchants is by no means peculiar to Philadelphia. Wholesale food markets the country over



Food-laden trucks jam Philadelphia's Dock Street market.



Street vendor looking for bargains adds to the traffic snarl.



NEW MARKET will be roomy, accessible.



Boy delivers to trucks that can't get close to supplier's door.

Get more cash

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For more information write and say, "Send me facts about the plan described in Business Week." Address the nearest COMMERCIAL CREDIT CORPORATION office: BALTIMORE 2; Commercial Credit Building, CHICAGO 6; 222 W. Adams St., LOS ANGELES 14; 722 S. Spring St., NEW YORK 17; 100 E. 42nd St., SAN FRANCISCO 6; 112 Pine St.

ONE BILLION DOLLARS

COMMERCIAL CREDIT COMPANY's subsidiaries, during each of the past several years, advanced over one billion dollars to manufacturers and wholesalers to supplement their cash working capital.



suffer from the same antiquated facilities, the snarled-up traffic. This especially is true of the older cities—Baltimore, Boston, New York—and fast-growing areas such as Los Angeles and San Francisco.

In these markets, most of the merchants are wholesale commission merchants. A few take title to the merchandise they sell; most sell as agents for their suppliers, collecting a commission for their services—usually from 7% to 10%. They buy from packing concerns that gather produce from farmers, grade and pack it in wholesale lots (truckloads or carloads); from associations of farmers that have banded together to do their own grading and packing; or from large individual farmers who have their own facilities.

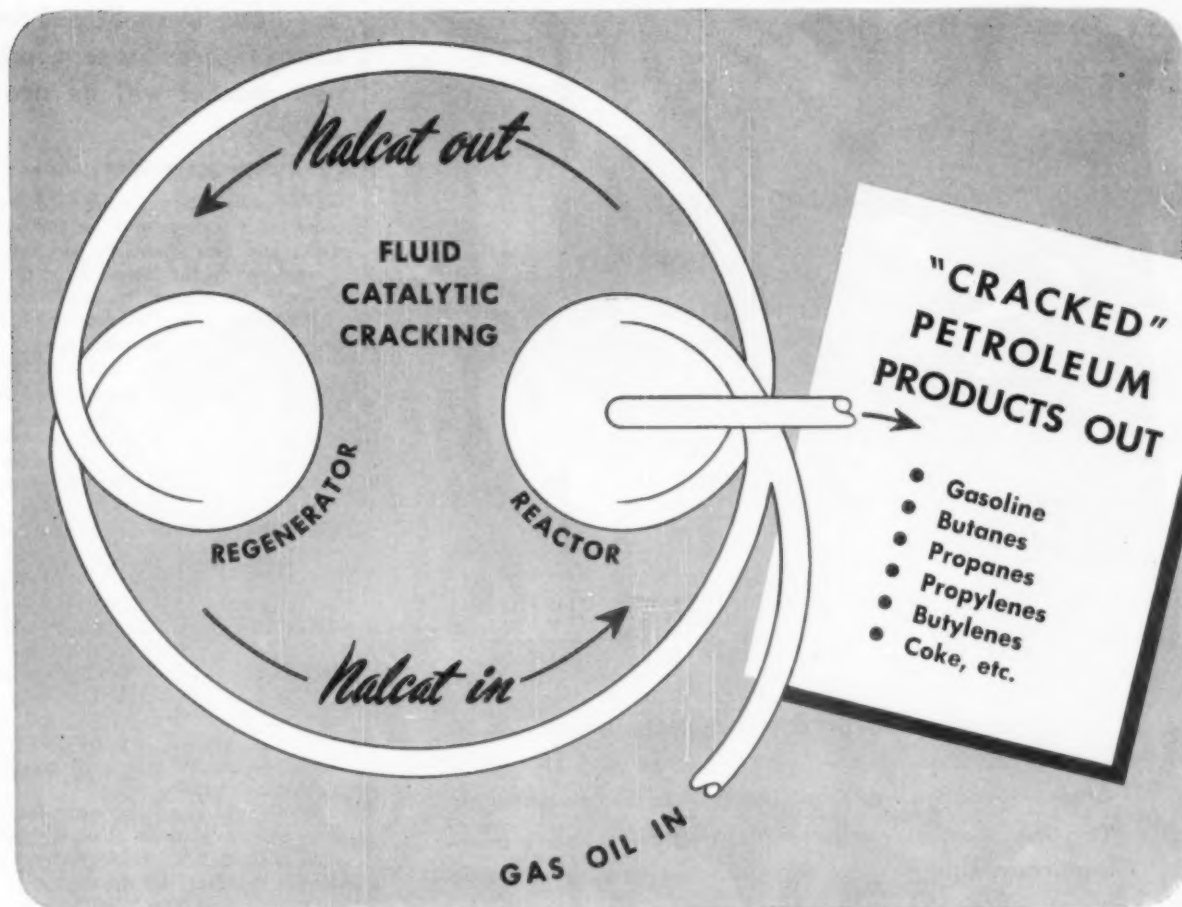
Fruit sales are handled differently. Most of the fruit for Philadelphia comes by rail to the terminals of Pennsylvania RR and the joint terminal of Reading and Baltimore & Ohio RR, where it is auctioned off to retailers and wholesalers. The railroads operate the auctions, which are adjacent to the site of the new center.

In all, Philadelphia wholesalers handle about \$1-billion worth of food of all kinds a year. About 80% of it goes to retailers, the rest to commercial establishments and institutions. Dock Street, specializing in fresh fruits and vegetables, does between \$115-million to \$125-million. It doesn't like to say so, but in recent years it has probably been losing business, as other city markets have done. Total tonnage probably has stayed about the same, but the markets are losing ground in the share of the business they do.

• **Distribution Costs**—The big retail chains discovered years ago that they could get cheaper distribution by going to growers or to growers' cooperatives and shipping direct to their own warehouses. One big cooperative, Sunkist, estimates that today it does 60% of its business direct. This is double, and maybe triple, the amount it sold direct 10 years ago. A Washington Market merchant figures that the amount of food passing through New York's wholesale market has dropped 20% in the past 20 years.

Crowded and inadequate facilities, traffic congestion add hours and dollars to distribution costs. The U. S. Dept. of Agriculture estimates that in New York, for example, it costs \$125 a carload to unload food from the railroad car at the piers, move it by truck to the market, and unload it. The job should cost maybe \$10, it reports.

• **Philadelphia's Project**—In many areas, steps have been taken to improve the picture. Boston rebuilt its meat wholesale market four years ago. Some of the smaller southern cities have developed new and thriving mar-



Catalytic **MERRY-GO-ROUND** Produces High-Octane Gasoline

● Chances are great that the gasoline in your car is all, or mostly, a product of fluid catalytic petroleum cracking—a continuous process by which gas oil in contact with hot catalyst is cracked into gasoline and useful by-products at high rates and high efficiency.

Catalysts in these processes are used over and over—literally a high-temperature, high-speed merry-go-round that requires physical ruggedness as well as chemical precision in their make-up. Nalcat Fluid Cracking Catalysts are actually tiny, microscopically-porous spheres, made to exacting specifications, and having relatively tremendous surface area for most efficient catalytic action.

Nalco's Catalyst Division is one of the three leading producers of cracking catalysts and operates plants both in the Midwest and on the Pacific Coast.

Nalcat performance and acceptance are a good symbol of Nalco Products in general . . . Better products, as promised, when promised.

CATALYST DIVISION—NATIONAL ALUMINATE CORPORATION

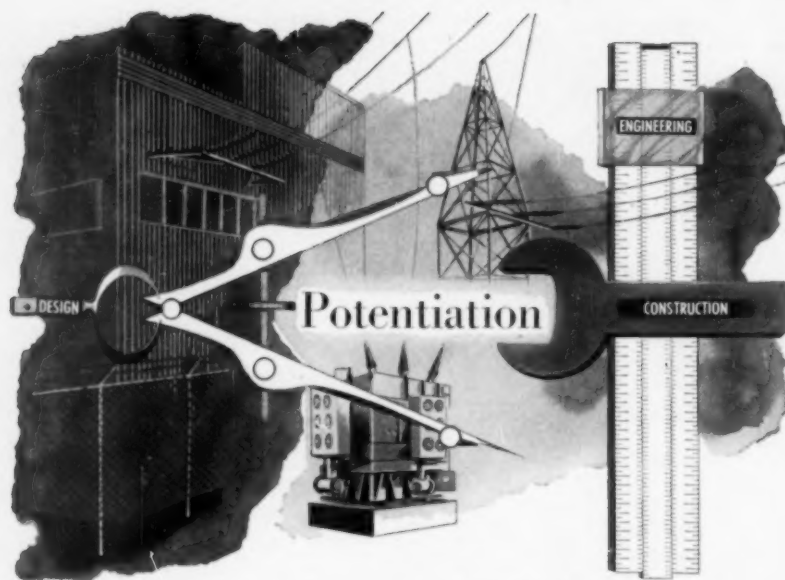
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MANUFACTURERS
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AIR TREATING EQUIPMENT

"... one Dock Street merchant figures his rent in the new market will be nearly \$200 less ..."

PRODUCE MARKET starts on p. 61

kets close to the producing field. Many older cities have projects in the works. Tulsa and San Francisco are keeping a close eye on the Philadelphia plan.

There are several reasons why the Philadelphia project is developing into such a wide-scale undertaking.

First is the city's location, smack in the middle of the populous Middle-Atlantic states. More important, the land is right at hand. The new food city will rise on nearly 400 acres in South Philadelphia. It has strategic access to high-speed turnpikes, air transportation (just minutes away), water transportation (the Delaware flows a few blocks to the east), and rail.

Wholesalers will occupy roughly half of the new center; food manufacturers and processors will settle in the southern half. The wholesalers will have single-storied buildings for each of seven food lines: fruits and vegetables, seafood, poultry and eggs, butter and cheese, meats, dry groceries, and frozen foods.

Finally, there will be space for garages, service stations, motels, restaurants, a hostel for truck drivers, and an office building—for the center.

• **Dream Come True**—To Dock Streeters, the center is practically a dream come true. The wide paving that attracted merchants there 200 years ago shrinks drastically when trailer trucks back up to the doors. At the peak marketing hours—from 3 a.m. to 7 a.m.—truckers who can't get to their destinations unload in the middle of the street, block off all traffic. Hardy retailers who brave the hazards crawl over baskets, crates, bags of produce. Somehow or other, they have to make it. For while the big chains, buying in large lots, can afford to bypass the market, the smaller stores will find no place else where they can get such a variety of produce in one spot.

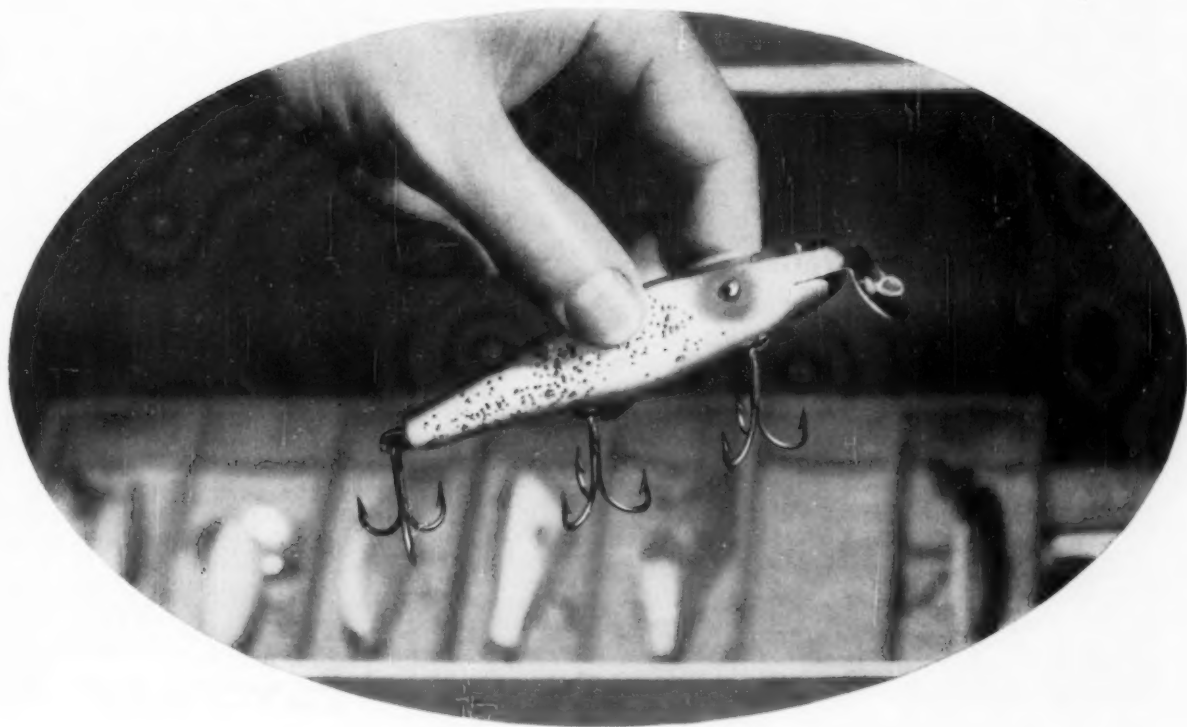
• **Two-Way Profits**—Both seller and buyer expect to profit from the new center.

For Dock Streeters, rents will be cheaper. One Dock Street merchant who pays \$500 a month now for a prime spot figures his rent in the new market will be nearly \$200 less.

Retail customers expect to benefit. One local chain says that, with all food wholesaling concentrated in one area, it can buy more of its supplies at home.

Furthermore, retailers who buy in the field run a risk on timing. A retailer may buy a mountain of beans, say. Then when he gets the beans to the store,

YOU'RE JUDGED BY **your lure**



YOU'RE JUDGED BY **your printing**

The final judge of a lure's merits is the fish, not the fisherman. And when you use printed selling pieces to lure prospects, your final judge is the reader.

He has examined hundreds of booklets, brochures, broadsides, folders, manuals, reports and catalogs. He has learned to appreciate and respect the ones that are distinctively printed on quality paper. They appeal to his good taste and judgment.

If you show respect for your prospect's taste and judgment by sending him distinctive printed literature, he'll respect you in return. Make sure, there-

fore, that *your* booklets always reflect the good name and character of *your* company. If they do, they'll win many good friends and customers for you.

Your teammate — a GOOD printer. The way to look your best in print is to consult a good printer at the very start of the job. He can deliver printed pieces that will draw favorable attention to your product or service, enhance your reputation and increase your sales. A good printer will probably specify Warren's High Standard Printing Papers. He knows that Warren papers produce top quality printing results. *S. D. Warren Company, 89 Broad Street, Boston 1, Massachusetts.*



**printing papers
make a
good impression**

News Briefs

from SPARTON Corporation

Electronic eyes for new jets

Now being installed in Air Force interceptors: a new guidance system called the Data Link, which provides the pilot with "electronic eyes" to seek out and destroy enemy aircraft or missiles regardless of visibility. Here's how: radar reports on intruder flights are collected at a ground control station, then flashed to interceptors overhead. The Data Link corrects for each aircraft's altitude, air speed and bearing to effect interception—automatically. Data Link will then guide interceptors back to base. Each Data Link system can control up to 700 aircraft simultaneously.

Responsibility for supplying markedly smaller, yet more efficient, aircraft radio receivers required for the Data Link system, rested with Sparton Electronics Division. Combining new transistors and lighter metal alloys with new techniques and principles, Sparton cut the receiver's weight by 75%; reduced its size by some 80%! Sparton's problem solving development and production engineering experience in the field of electronics can serve your organization. Why not con-



U. S. Air Force F-104 Interceptor

tact Sparton Electronics Division for a conference at your convenience? The address is: 2400 East Ganson Street, Jackson, Michigan.



New Celanese Corp. Houston Plant

How to help ease a plastic shortage—fast!

Celanese Corporation of America faced a rapidly expanding market for their new, high density Polyethylene material. Present facilities could not begin to meet demand. The only solution was a new plant, in production as fast as possible.

To put the new Celanese Corp. Houston Plastics Plant in production—in a hurry—called for 70 miles of piping, countless welded joints, valves, connections and seals. Fine teamwork by Flori-Houston helped bring about production of 100,000 pounds per day of this new plastic in just a few short months. As an example of Flori-Houston's production efficiency, 1268 pieces of special pipe were fabricated and shipped in just six weeks, and an additional 182 pieces of special alloy pipe were completed and shipped in just half that time.

Other recent pipe-fabrication projects completed by Flori-Houston: the Tidewater Delaware Refinery outside Wilmington, largest alloy fabricating undertaking ever, and the Delaware City Power Station (to which all alloy piping was shipped to job-site within 90 days of receipt of materials). For more information about these and other Flori-Houston installations, address The Flori Pipe Co., 601 East Red Bud Ave., St. Louis 15, Mo.; or, Houston Pipe & Steel, Inc., P.O. Box 2, Houston 1, Texas.

Sparton

CORPORATION JACKSON, MICHIGAN
Formerly The Sparks-Withington Co. S-6

CONTRIBUTING TO INDUSTRIAL PROGRESS THROUGH THESE NINE DIVISIONS:
ALLIED STEEL & CONVEYORS DIVISION • SPARTON AUTOMOTIVE DIVISION • SPARTON ELECTRONICS DIVISION • SPARTON CONTROLS DIVISION • FLORI PIPE CO. • HOUSTON PIPE & STEEL, INC. • STEGER FURNITURE MFG. CO. • SPARTON BROADCASTING CO. • SPARTON OF CANADA, LTD.

a storm may keep customers home. So spoilage mounts up. With so many sources right on tap in the center, the field man can buy more lightly, rely on the local buyer to fill in.

Right now the center is talking of a direct savings to the wholesale merchants of about \$3-million a year. Add in what the retailer—and, it's hoped, the consumer—will gain, and talk is of annual savings of about \$6-million.

• **Instigators**—Just as remarkable as the concept of a new center is the combination of forces that got it rolling.

For years, the city has recognized that in Dock Street it had a vital food supply problem. Plan after plan was put forth to "move Dock Street," but they withered, either for lack of financing or lack of enthusiasm on the part of the wholesalers themselves. Bad as things were, they worried that if some moved, some might stay. This would split the market so that retailers could play one area against another for price advantages.

In 1953, the Greater Philadelphia Movement, an association of civic-minded businessmen, tackled the problem. Working with the Dept. of Agriculture, Pennsylvania State University, and the Philadelphia Redevelopment Authority, GPM came up with the idea of an integrated market for manufacturers and processors.

GPM formed Food Distribution Center, Inc., and collected nearly \$250,000 from local businesses.

The Redevelopment Authority made the next move, in approving the site chosen. The City Council appropriated \$15.5-million to buy and ready the property—once burning dumps—grade streets, put in lights, sewerage.

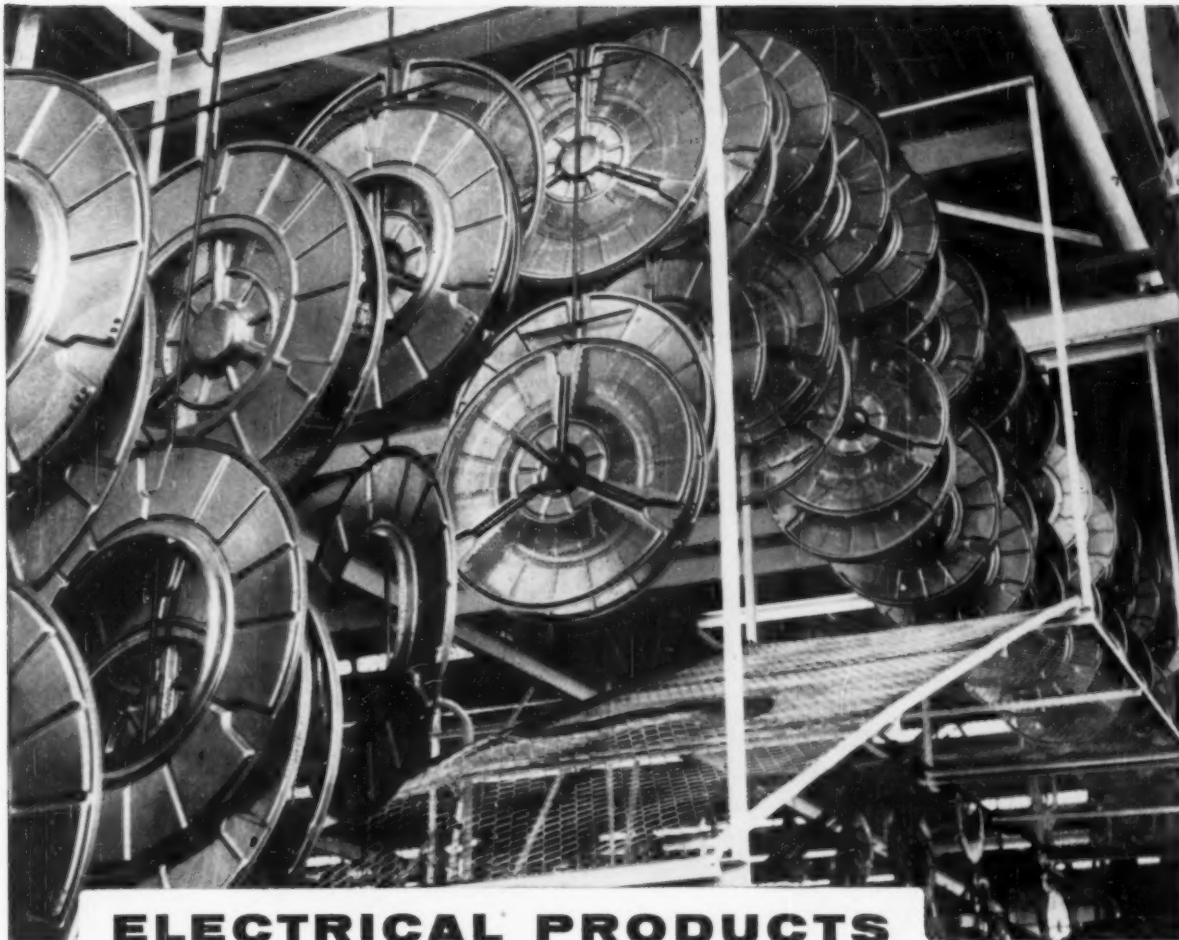
Once the land is ready, probably this fall, Food Distribution Center will pay the city \$1 for the property. Actual building is expected to begin late this fall or early 1958. Meanwhile, the city is set to condemn Dock Street, so that Dock Streeters will have to move.

• **Tenants' Deal**—FDC has drawn up working plans and begun negotiations with possible tenants.

There are three routes into the center. Would-be settlers may buy land outright and put up their own buildings. Or they may rent. They may groundlease a plot for 25 years, with option for another 25, and put up their own building. Or they may lease quarters built by the center.

Except for the land that is sold, the center will revert to the city after all expenses have been paid, or, failing that, in 50 years.

• **Precedent Setter**—The Philadelphia project is heartening wholesalers in other cities. Right now, the Dept. of Agriculture is winding up studies of the needs of various markets. Philadelphia may provide the spur. **END**



ELECTRICAL PRODUCTS

one of many industries locating or expanding
in **THE CENTER OF INDUSTRIAL AMERICA**

With more than 55 plants employing over 35,000 persons in **THE CENTER OF INDUSTRIAL AMERICA**, production in the electrical products industry has stepped up to match the growing demand for TV, radios, washers, dryers, motors, wire, lamps and the like.

If you buy from or sell to such an industry, you may find many location factors working in your favor, too.

This area is rich, too, in natural resources, fuel, water supplies, and plentiful low-cost electric power. It has the great advantage of strategic location astride the greatest turnpike system in the nation, is served by nine mainline railroads and is linked by eight harbors to the coming St. Lawrence Seaway. Here, you are "next door" to America's major markets, yet away from their congestion and traffic bottlenecks.

Get the full story, sent promptly and without obligation. Write: *Area Development Department BW, Ohio Edison Company, 47 North Main Street, Akron 8, Ohio; or Pennsylvania Power Company, 19 East Washington Street, New Castle, Pennsylvania.*

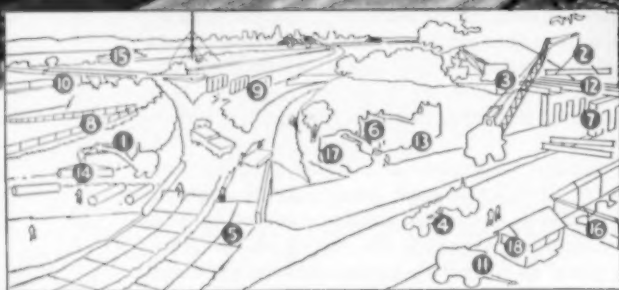
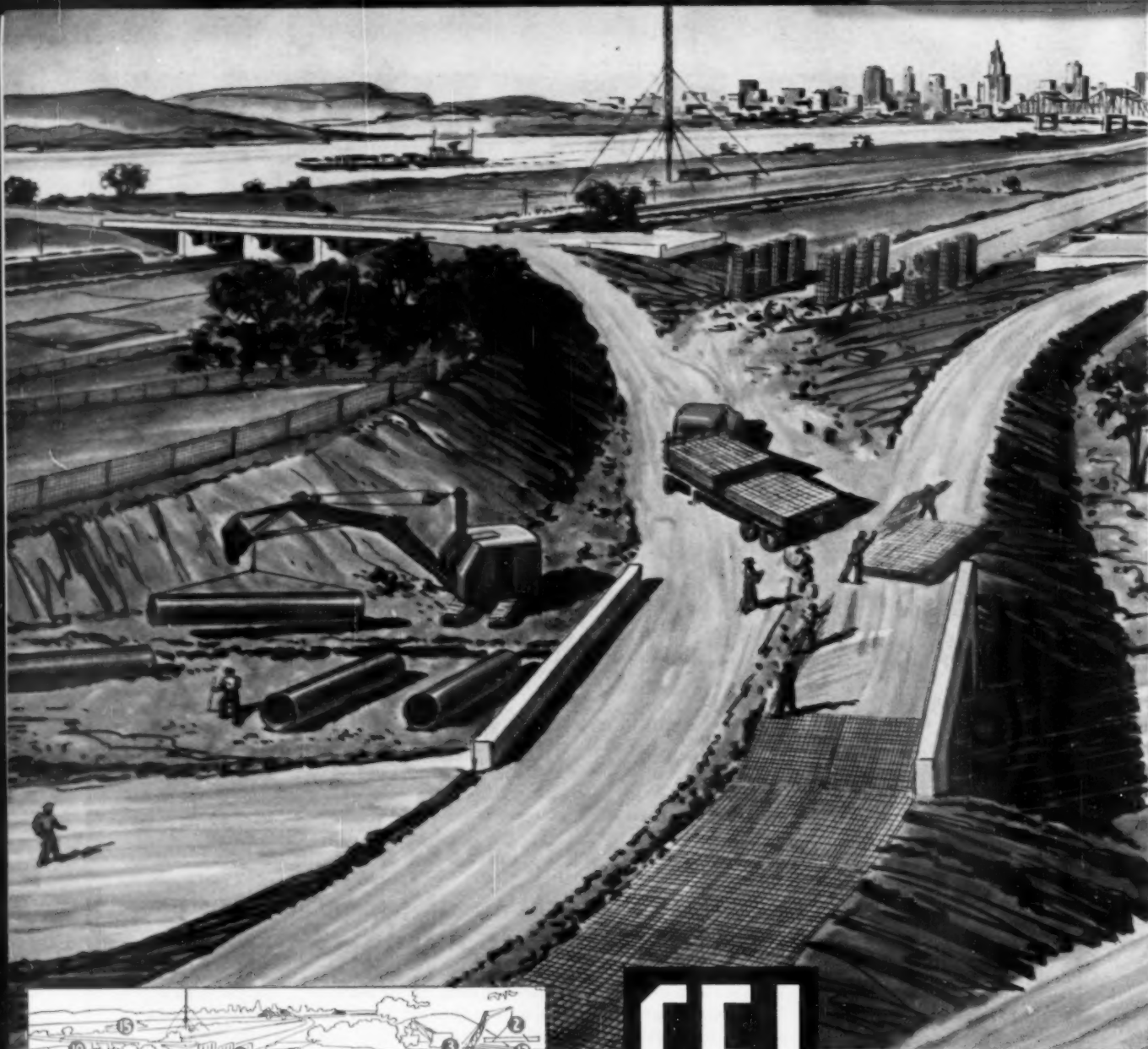


© 1957, O. E. Co.

Ohio Edison System

OHIO EDISON COMPANY

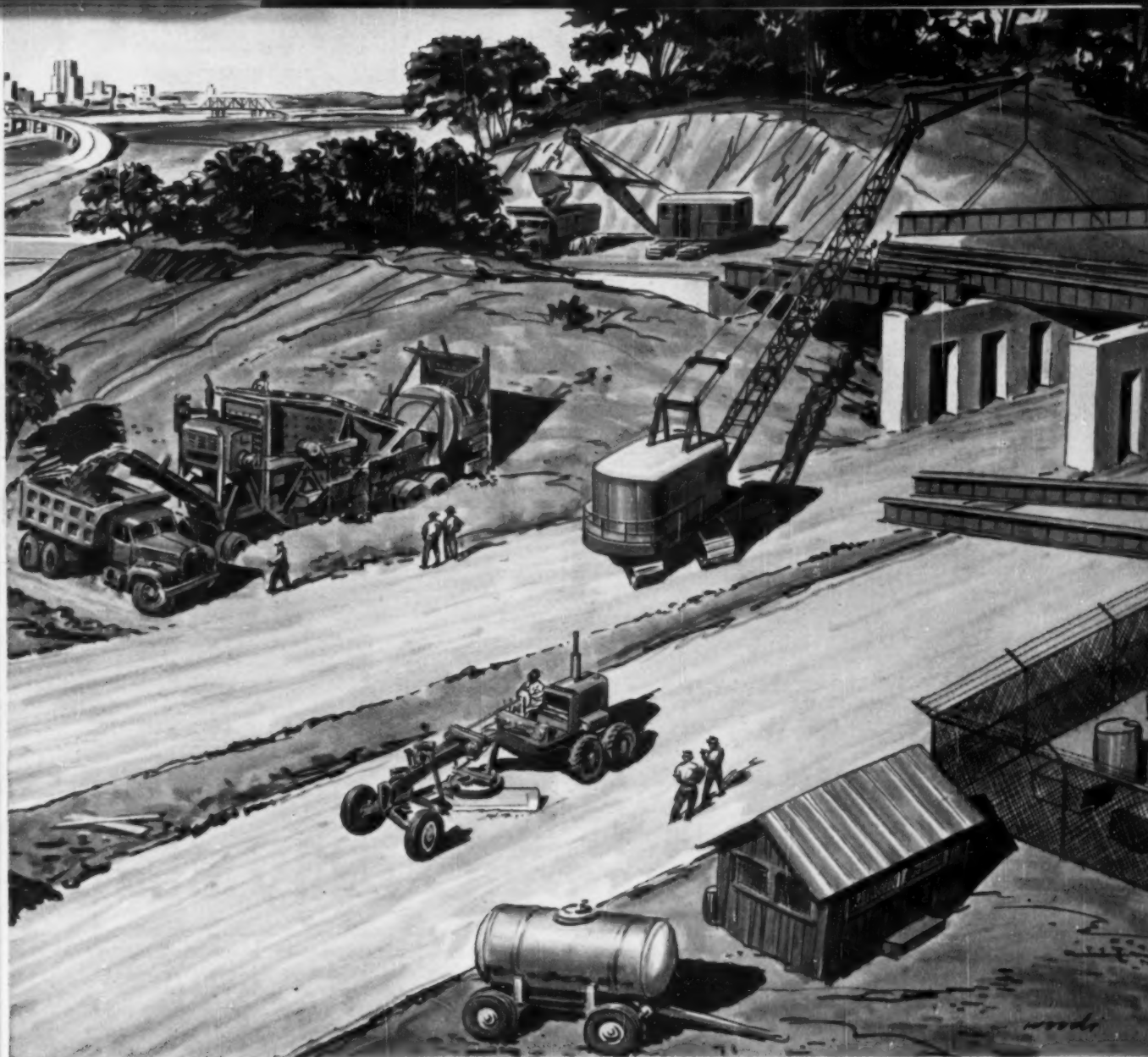
PENNSYLVANIA POWER COMPANY



CF& STEEL

- ① Wickwire Rope
- ② Wickwire Wire Rope Slings
- ③ Wickwire Boom Pendants
- ④ CF& Cutting Edges
- ⑤ Clinton Welded Wire Fabric
- ⑥ CF& Industrial Screens
- ⑦ CF& Reinforcing Bars (in concrete)
- ⑧ CF& Woven Wire Fence & Fence Posts
- ⑨ Cal-Tie Wire

- ⑩ CF& Rails, Spikes, Track Bolts and Tie Plates
- ⑪ Claymont Heads
- ⑫ Claymont Welded Steel Plate Sections
- ⑬ Claymont Fabricated Steel Parts
- ⑭ Claymont Large Diameter Pipe
- ⑮ Claymont Alloy Steel Plates
- ⑯ Realock Chain Link Fence
- ⑰ Wickwire Springs
- ⑱ Gold Strand Insect Wire Screening



PRODUCTS . . .

answering America's road call

Superhighways don't just happen. They are the result of careful planning by skilled engineers and builders . . . as well as the ability of manufacturers to have equipment and materials on the job site whenever and wherever they are needed. Today, America's accelerated roadbuilding program is mak-

ing the task of these engineers, builders and manufacturers more challenging than ever before.

As a leading manufacturer of steel products for highways and other types of construction, CF&I pledges its wholehearted cooperation during the years ahead.

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THE COLORADO FUEL AND IRON CORPORATION—Albuquerque • Amarillo • Billings • Boise • Butte • Casper • Denver • El Paso • Ft. Worth • Houston • Kansas City • Lincoln (Neb.) • Los Angeles • Oakland • Oklahoma City • Phoenix • Portland • Pueblo • Salt Lake City • San Antonio • San Francisco • Seattle • Spokane • Wichita • WICKWIRE SPENCER STEEL DIVISION—Atlanta • Boston • Buffalo • Chicago • Detroit • New Orleans • New York • Philadelphia

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4434



ROADSIDE SHOP of Orvis Co. offers finest in fishing tackle, other luxury items to tempt vacation-bound customers. Company is . . .

Hooking Buyers by Quality Bait

THE NEW roadside showroom of the Charles F. Orvis Co. (pictures) looks like a pint-sized version of New York's Abercrombie & Fitch. For Orvis, manufacturer and purveyor of some of the highest priced fishing tackle equipment in the country, the new store is an attempt to make a bigger splash in the fishing pond.

Orvis fly rods—ranging in price from a beginner's version at \$55 to as much as \$170—are what Orvis Pres. D. Clarke Corkran considers the "Cadillacs" of the fishing world. Many sportsmen agree.

• **Small, But Growing**—Right now, the Orvis Co. is in the middle of its peak season as hundreds of fishing enthusiasts

trek northward to their favorite fishing streams. Its showroom and factory are located at Manchester, Vt., the gateway to northern fishing waters.

As a business, Orvis is not much heavier than one of its fine fly rods. Sales are climbing, but still amount to only about \$500,000 a year. But last year, volume took a big 20% jump and Corkran aims to keep sales rising in an industry where nobody ranks as a giant.

• **Assets**—Corkran, a 61-year-old ex-Philadelphia broker who retired early to run this business as a sort of hobby, thinks his company has these major advantages to make it grow:

• A business tied directly to an important segment of the expanding leisure market. Dept. of Interior estimates that 22-million people spent more than \$250-million on fishing tackle last year.

• A quality line of products—produced at its Manchester plant and imported from foreign sources—designed

DOUBLE LURE—fishing gear for men, apparel for women—pulls in passersby.





MEN take their time getting the feel of Orvis fly rods priced at \$55 to \$170 while trading ideas with Lew Oatman (left) noted fly fisherman who tends Manchester (Vt.) store.



WOMEN can shop for quality sports clothes or other special wares, including imports, in an adjacent store run by Mrs. Frances Corkran, wife of Orvis president.

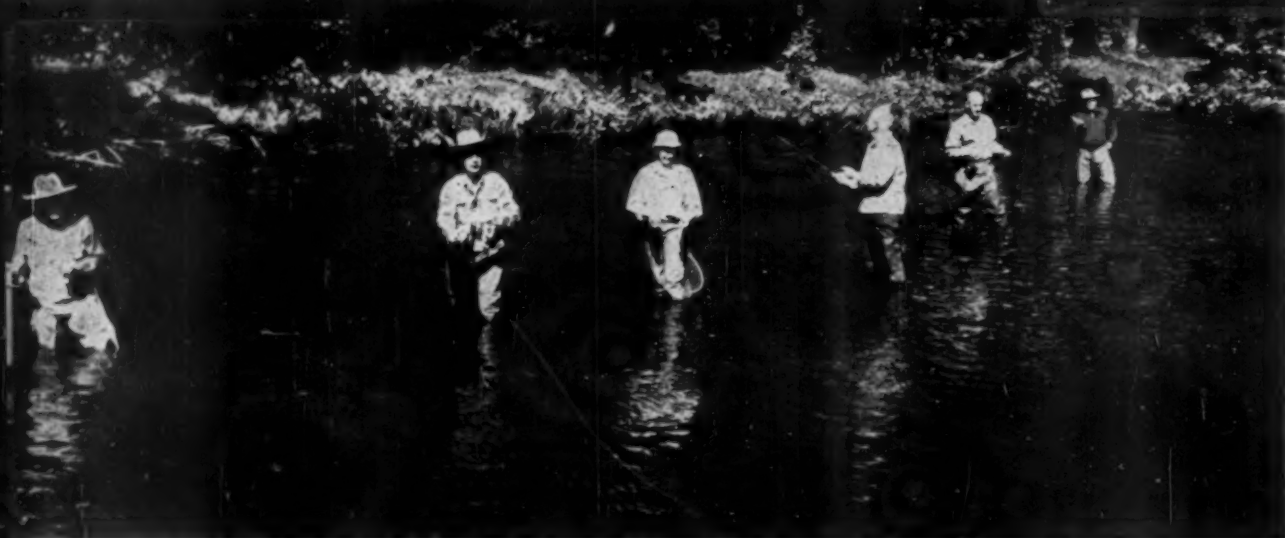


CHILDREN of stopping motorists have no trouble at all occupying themselves tossing rocks at rising trout in the casting pond just behind wayside tackle center.

BUSINESS WEEK • June 15, 1957



ORVIS PRESIDENT is D. Clarke Corkran, a retired broker from Philadelphia.



BOARD OF DIRECTORS is composed of fishing enthusiasts. Left to right are Corkran; Dr. William Milner, Albany, N. Y.; Mrs. Corkran; Anton G. Hardy, ex-Wall Streeter; Christian W. Schafer, former Illinois banker; Carlton B. Overton, New York paper company president.

to take advantage of today's upgraded tastes and higher incomes.

- A process for making quality rods that enables the company to out-produce virtually any of its competitors.

- A merchandising idea that this year seems certain to pay off in increased sales and at the same time makes the company better known.

- **Simple Idea**—It's this last point that Corkran sees as his major project now. Last year Orvis spent about \$50,000—a major investment for a small business—to build the wayside tackle center. It includes a trout pond in the back, a women's store, and the fishing and sports equipment shop.

The idea is simple. Since the factory already was on Route 7, thoroughfare for vacation-bound families, Corkran decided to capitalize on the traffic.

"For years," says Corkran, "I have seen the pilgrimage of vacationing fishermen coming to the factory to pick out the rod they had dreamed of and have had the sale interrupted by an impatient wife who sat out in the hot car trying to keep the kids in tow."

Now the kids play out back, casting stones at rising trout while (1) the wife shops and browses amongst fancy, high-grade imported goods and (2) the husband takes his time inspecting the rods and tackle in the fishing room.

Says Corkran: "Rods will sell women's clothes and women's clothes will sell rods. Once a fisherman gets one of our fine rods in his hand, he'll give up his truck and save pennies to buy our Cadillacs."

So far the store rings up only a small part of Orvis sales, but if this experiment works out, Corkran expects to open other roadside fishing shops in parts of the country where they are scarce.

If that happens, it will bear out Corkran's belief that there's real money

in the business of supplying fine fishing goods.

- **Antiquated Craft**—Actually, few companies make much money from the growing demand for fine tackle. There are only a handful of fine rod makers. Rod production is limited by handicraft methods and a short supply of the kind of bamboo needed.

Orvis itself operated that way until Corkran decided to leave the brokerage business for golf (he was a ranking U.S. amateur) and the opportunity to pick up the moribund company for \$3,000 in 1940. Founded 100 years ago by one of the original fly rod makers in the U.S., Orvis had nothing much but a name at that time, but Corkran and a wealthy friend, the late Bartlett Arkell, figured they could rebuild the company.

- **New Process**—After five years of research—with the help of Union Carbide Corp. and its subsidiary, Bakelite Co.—Orvis developed a process that cut rod-making from six months (mostly for curing) to 24 hours by gluing and impregnating the bamboo strips with phenolic cements and resins.

With this process, Orvis could produce just about as many rods as it wanted to.

- **Bamboo Bottleneck**—Except for one thing—the supply of Tonkin bamboo, which comes from a small area west of Canton, China. During World War II, that supply was cut off. Orvis and the United Fruit Co. cooperated with the U.S. government in trying to find substitutes when Orvis got a contract to make ski poles for the armed forces. But nothing quite met the Tonkin standards in size, the smallness of joints, and the density of the fibers.

After the war, shipments were resumed but again were cut off—this time for good—by the Korean War. So Corkran started buying up all the Tonkin bamboo he could find in the coun-

try. He ended up with what now amounts to a 20-year supply—that is if Orvis doesn't boost production too much.

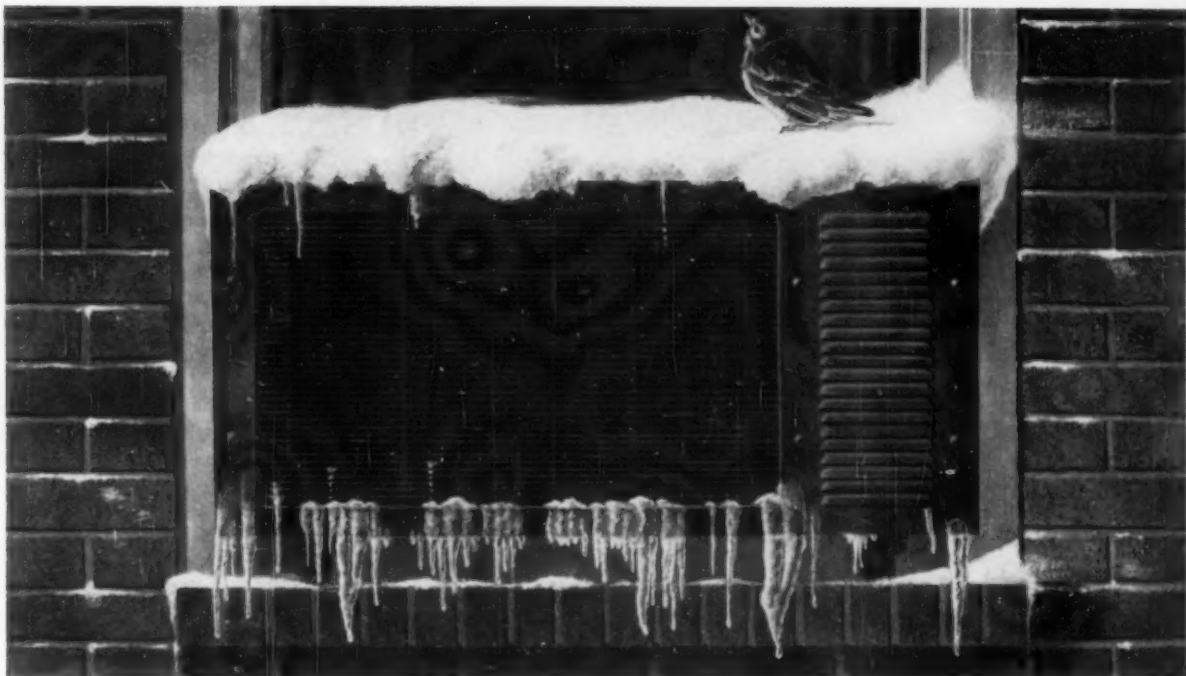
Right now the company can afford to make 2,500 to 3,000 fine rods a year with present inventory. More than that and Corkran will produce his company out of the business much too quickly. That figure, by mass production standards, is minuscule. But compared to other rod makers it is big. E. F. Payne Co. of Highland Mills, N. Y., makes only 200 a year, the H. L. Leonard Co., 450. The Thomas Rod Co., an old and renowned name in the field, turns out only about 150 rods a year today.

Corkran thinks pressure of demand will force him to increase production, but he doesn't like the idea. For one thing, he might lose what skilled craftsmen he has—some 25 production workers on the line—if they realize they are working themselves out of a job.

- **Expanding Line**—That's one major reason Orvis has continually added to his line of fishing equipment and related merchandise—such things as Gibbs' miniature birds and Bishop's crystal ware in sports motif, now on display at the Manchester showroom.

Today, Orvis has some 1,500 items in its line carried by 3,000 of the 14,000 tackle dealers in the country. It also sells through a high-grade catalogue that is mailed to some 55,000 fishermen annually.

- **Imports**—A lot of this merchandise—accounting for some \$273,000 in sales including Orvis and Young reels—is imported. Corkran after the war made connections with topgrade manufacturers in England and Western Europe. He got help from his board of directors—businessmen fishing enthusiasts such as Henry C. Flower, Jr., vice-chairman of the advertising agency, J. Walter Thompson Co., and Carlton B. Over-

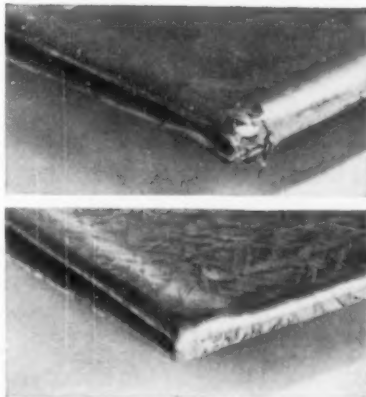


Air conditioners weather more winters in a shell of this special Armco Steel

An air conditioner, or *any* product that you want to remain attractive, benefits from a special steel—Armco ZINCGRIP PAINTGRIP. Here's why:

1. The protective zinc coating on ZINCGRIP PAINTGRIP *stretches* with the base metal to take as severe forming as the steel itself—without peeling or flaking.
2. ZINCGRIP PAINTGRIP has a special mill-Bonderized surface that takes paint without pretreatment of any kind, and preserves it longer. It's covered by a tightly adherent film that *insulates* the zinc from the paint. This prevents the zinc from drying essential oils in the paint—retards peeling.

Armco ZINCGRIP PAINTGRIP is a good face to put on your product... for durability and attractive appearance. It says "quality."



Above—severe double bend flakes the zinc coating on standard galvanized steel sample. *Below*—the rust-resistant skin of Armco ZINCGRIP *stretches* with the steel even at the corners—does not flake.



This scratch test demonstrates the paint-holding ability of Armco ZINCGRIP PAINTGRIP. The PAINTGRIP-treated right side of this sample holds paint firmly, leaving only a hair-line scratch, but paint flakes readily from the untreated left side of the zinc-coated steel.

ARMCO STEEL CORPORATION

MIDDLETOWN OHIO



SHEFFIELD STEEL DIVISION • ARMCO DRAINAGE & METAL PRODUCTS, INC. • THE ARMCO INTERNATIONAL CORPORATION

GENERAL REFRACTORIES



BIRDIE . . . thanks to Brick!

A "just right" stroke with the putter . . . the ball curves out in a long smooth arc heading right for the cup . . . and IN for a soul-satisfying birdie! Without brick—refractory brick—to contain the flames of industry, the pleasure of golf would not be possible. You would have no rubber for the ball . . . no steel for the clubs. No mower to trim the fairways and clip the greens. No clubhouse.

Everything that is made or moved starts with a refractory of some kind. To meet their almost infinite demands, General Refractories provides a complete refractories service.



**GENERAL
REFRACTORIES
COMPANY**

PHILADELPHIA 2, PA.

ton, president of Castle & Overton Co., New York paper company—who acted as emissaries for Orvis on frequent business trips to Europe. They convinced the fine tackle companies there that Orvis could act as their selling outlet.

This expanding line of merchandise has given Orvis the leverage for the kind of growth it thinks possible in the sports business. The Manchester showroom, situated as it is, should help the company build more names into its catalogue mailing list—which accounts for about 25% of total volume now.

Next year, the Orvis catalogue may sport a new item. Says Corkran:

"We have plans for a Tonkin bamboo shaft golf putter next year. We could sell 1,500 a year—but the major problem is how much inventory to use."

New Packaging Tricks Pep Up Lagging Sales

A good package won't sell a poor product, but the wrong package can just about wreck a good product. Wooster Rubber Co., producer of Rubbermaid household items, has just demonstrated this fact dramatically.

Pioneer manufacturer of molded rubber lines such as sink mats, dustpans, and the like, Wooster spent seven years finding out why a top-notch product wouldn't sell. Now the same product, reintroduced three months ago, is going great guns.

In 1950, the Wooster (Ohio) concern introduced Shelf-Kushion, a very thin, ribbed rubber, primarily for shelf lining. It gave every promise of being a sales winner. Wooster packaged the rubber sheets into handy precut lengths. Market tests indicated it should go over big. The company invested some \$60,000 in equipment.

Only one thing went wrong. Shelf-Kushion didn't sell.

• **A Reappraisal**—James R. Caldwell, president, and his team were baffled. They had built company sales to \$20-million last year. None of the 70-odd other products had ever done so poorly. So Wooster started out all over again, came up with some conclusions:

- Women like to feel a product they buy.
- They like to buy just the right amount.

So Wooster took Shelf-Kushion out of its bright, modern package, bought a continuous rubber mill for \$100,000, and started turning out the Kushion in rolls, as if it were a fabric.

That did the trick. In the past three months, with limited distribution, sales averaging \$100,000 a month have already passed sales of the precut package for all of last year. **END**

HERE'S HOW 200 TOP COMPANIES DEVELOP SUCCESSFUL NEW PRODUCTS

Now you can see why our industrial clients are consistently ten times more successful with new products than the average company. They all agree that these are the key factors:

SEVEN MOST IMPORTANT FACTORS

1. Product research (laboratory tests on the chemical, physical and biological nature of the product).
2. Thorough testing of the product *with consumers*.
3. Timeliness, and management's knowledge of the field.
4. Thorough and complete introduction to the trade (wholesalers, dealers and salesmen).
5. Adequate financing.
6. Consumer sampling (both before and after).
7. Packaging.

TRAPS TO AVOID

Just as important for you to know are the *reasons why most new products fail*. Here are the traps you must avoid:

1. Lack of a well-thought-out marketing program. Putting the product on the market before setting up adequate distribution channels.
2. Lack of pretesting with consumers . . . lack of information about how consumers will react, how the product compares with established products, what the product weak points are, and how the customer will use the product.
3. Lack of market research and testing. Too often, top executives *think* they have a market, jump into production, and then find no buyers.
4. Insufficient product research. Over-anxiousness to get the new product on the market leads to "kidnapping" it from the laboratory before all the bugs have been ironed out.
5. Lack of pretesting the packaging. A slight change in shape, size, color, or materials can

mean the difference between failure and success.

By avoiding these traps and using the seven fool-proof steps, **YOU** can increase your chances of success by 1000%!

YOU CAN APPLY THIS TESTED FORMULA

This analysis of the successes and failures of thousands of companies reveals a definite pattern of successful new product development. You can use it in your own business for greater profit. You'll find the full story in our helpful new guidebook: "HOW TO DEVELOP SUCCESSFUL NEW PRODUCTS." It outlines the pattern in greater detail and gives many interesting case histories. It's free, without any obligation whatsoever.

This unusual 28-page booklet should help you increase your company's skill in developing products that really sell. You'll help increase sales, profits, and your own success.

And since our business is research, we've also included a lot of practical suggestions as to how you can cut research costs and still get more profitable results for every dollar spent.

The supply of this guidebook is really limited, so write TODAY for your free copy. Write to Foster D. Snell, Inc., Dept. B-6, 29 West 15th Street, New York 11, N. Y. DO IT NOW!

Helpful Free Outline



SNELL

36 YEARS OF SUCCESSFUL
NEW PRODUCT RESEARCH
AND DEVELOPMENT

New York, N. Y. • Baltimore, Md. • Bainbridge, N. Y. • Beverly Hills, Calif.

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Please send me your helpful FREE guidebook: "HOW TO DEVELOP SUCCESSFUL NEW PRODUCTS." No obligations whatsoever—even if the booklet helps me make a million dollars this year.

Name.....

Title.....

Company.....

Address.....

In Marketing

• • •

Bethlehem's Plate Capacity "Presold"

In 5-Year Order for 1,000 Hopper Cars

Steel plate—one of the steel industry's most volatile products, and currently in tight demand (BW—Dec. 8 '57, p38)—is getting some unusual marketing treatment. In a move aimed at smoothing out future demand, Bethlehem Steel Co., one of the largest producers, is "preselling" part of the additional capacity it is installing to help alleviate the shortage.

The Delaware & Hudson RR has ordered 1,000 hopper cars from Bethlehem, to be delivered at the rate of 200 per year for the next five years. **D&H gets a discount on the last 800 after the first group has been delivered.**

Plate demand is notoriously unstable. In 1954, steel-makers had very low operating rates on their plate mills, a situation that persisted well into 1955. Then under the impact of a capital goods boom and big demand for ships, the market zoomed. Late the same year, railroads came into the market with heavy car orders. Since then demand for plate has been high.

The D&H arrangement with Bethlehem not only gives the steelmaker some protection against future fluctuations in demand, but protects the railroad's needs as well.

• • •

Tennessee Court Slaps Down Tax

That's Key to Anti-Trading Stamp Law

Tennessee's anti-trading stamp law, which passed with such a whoop and a holler last spring (BW—Mar. 2 '57, p49), had a setback this week. Chancellor William J. Wade, of the state's lower court, declared the key provision unconstitutional. This set up a 2% gross receipts tax on merchants who give stamps. Wade upheld the provision that doubled the \$300 privilege tax on trading stamp companies—but it was the other clause that was expected to "drive out trading stamps from the state."

Wade ruled that the tax is discriminatory since it applies only to merchants who redeem through another company.

The state "very definitely" will appeal to the state Supreme Court, said Milton P. Rice, assistant state attorney general.

• • •

Auto Industry Swears Off Ads

Stressing Speed and Horsepower

The automobile industry put a check rein on the horsepower race last week, but the horses are expected to go right on running.

The Automobile Manufacturers Assn., representing all major auto companies in the U.S., recommended that

its members have no part in racing or other events involving speed, and, more importantly, refrain from suggesting speed or horsepower in advertising.

The decision has been under serious consideration for about six weeks and is supposed to have the unanimous support of the auto makers. **It is not expected to change construction or design of power plants for cars to any extent.** But it should reduce the pressure, which has cropped up in state legislatures recently, to stop the horsepower race.

The move will knock out participation by the factory in the much-ballyhooed Daytona Beach and other stock car races, out of which rise contradictory claims by practically every make of car each year. Use of "pace cars" in such events as the Indianapolis 500 is also expected to be discontinued.

For all the disclaimers of the car industry, at least one industrial designer, the firm of Lippincott & Margulies, feels that the resolution could usher in a new day in car design. The longer, lower look of today's car aims precisely to give a feel of speed, says Gordon Lippincott. If speed is de-emphasized as a sales tool, **the result could well be a major change in the styling of cars—not immediately, but perhaps by 1960.**

• • •

Antitrust Committee Raps FTC

For Ailments of TV Industry

Another document was added this week to the mounting pile of reports on the TV industry. The House Antitrust Subcommittee, under peppery Rep. Emanuel Celler (D-N.Y.), released a 148-page report that, though sharply critical of some network and Federal Communications Commission practices, did not go so far as many observers feared it might in spelling out specific remedies. The report, drawn from subcommittee's hearings last fall (BW—Sep. 29 '56, p27), shows a willingness to let FCC and the Justice Dept. find solutions.

The report blames "station scarcity and restrictive practices" by major networks for preventing "full realization of the nationwide and competitive communications system contemplated by Congress."

FCC gets the blame for the station scarcity. Its "vacillation" and "failure to encourage" the development of the ultra high frequency band puts the UHF telecasters at great economic disadvantage and retards the growth of the third national network.

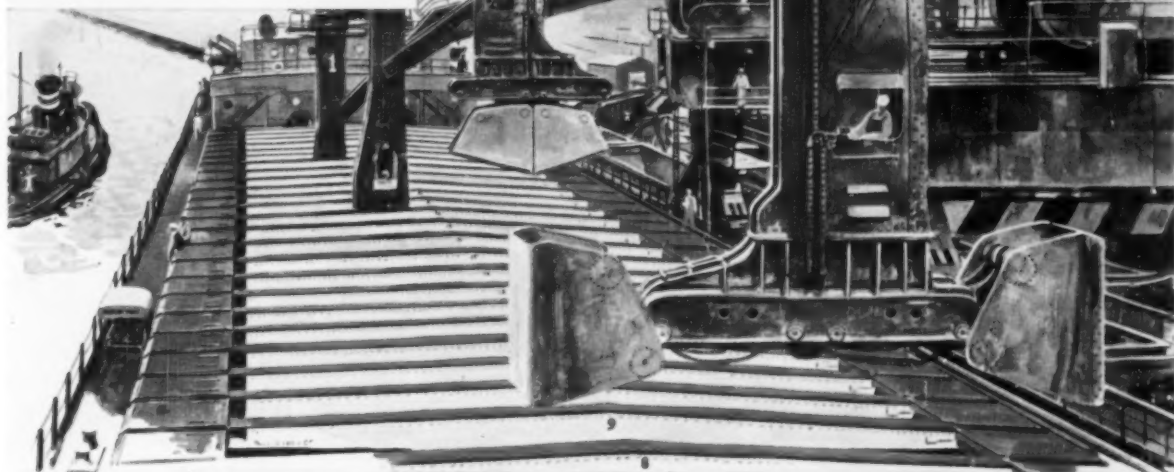
The report is further critical of FCC's regulation of broadcasting. Citing "an air of informality" about cases before the commission during the past decade, the report adds that commissioners have "repeatedly" discussed pending cases, "even going so far as to indicate how particular commissioners would vote." **The committee holds it "imperative" that FCC adopt a code of ethics to remedy this condition.**

Turning to the nets, the report praises Columbia Broadcasting System and National Broadcasting Co. for contributions to TV, and calls network operations "indispensable." But it goes on to attack their "dominant position" and certain practices. It suggests various changes in FCC rules, all directed to making them tougher.

Steel sets a stiff pace

When steel says "GO"

When steel says "GO", dependable Cutler-Hammer Motor Control awakes giant machines like these ore unloaders and handles them easily and safely.



When steel says "SLOW"

When steel says "SLOW", unseen but vital control units such as Cutler-Hammer resistors mounted far up on the crane assume a major role in safety.



When steel says "STOP"

Dependable Cutler-Hammer magnetic brakes are the outstanding choice of mill engineers for the many jobs where steel often says "STOP" and means it.

By its very nature, steel-making cannot tolerate delays. But it is also true that steel-making is tough on equipment, punishes it as few other jobs do. Tie these two facts together and it is easy to see that steel sets a stiff pace at any time. Tie them together under today's maximum mill schedules and you have the toughest trials mill equipment has ever been asked to survive.

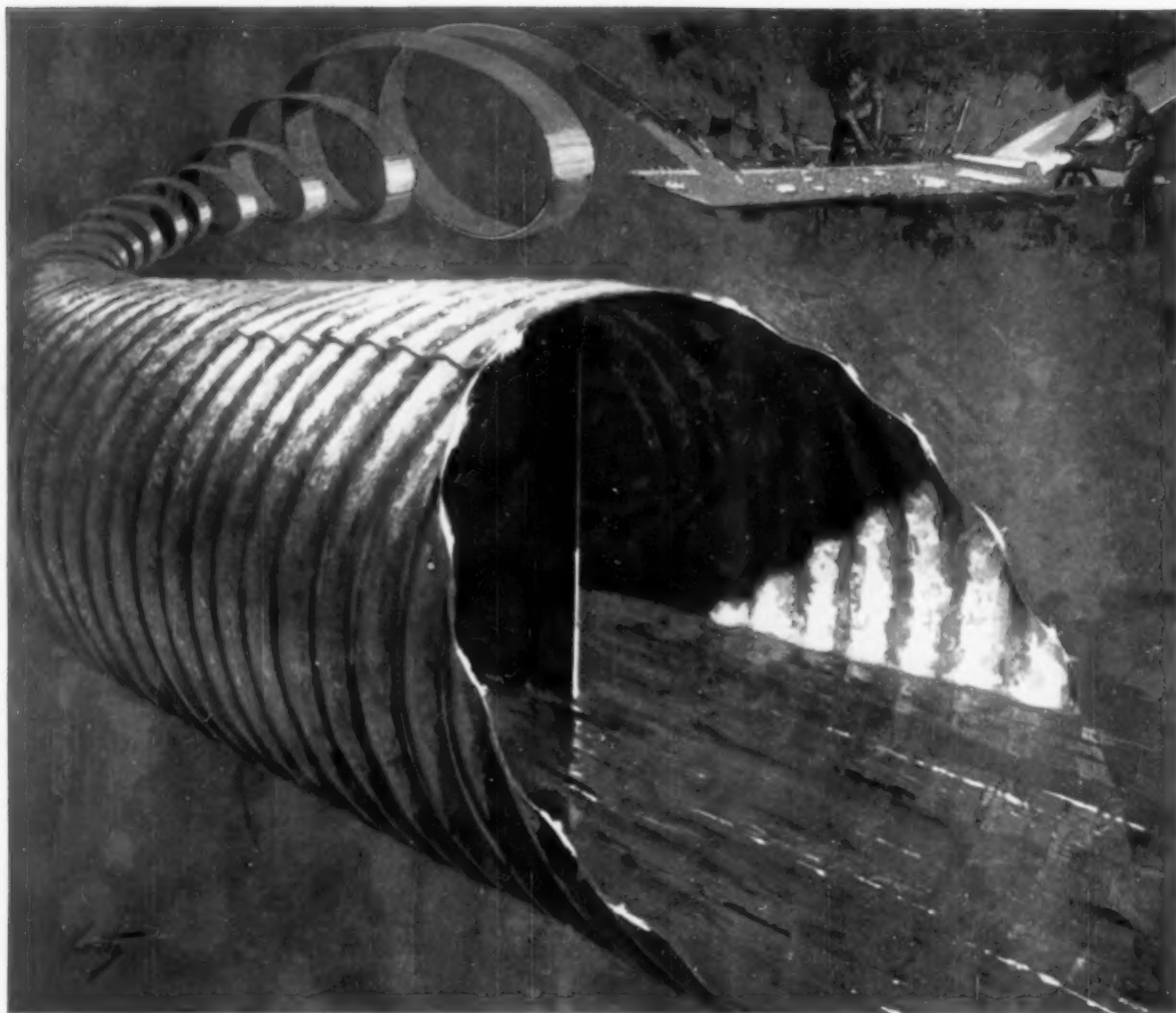
This situation puts much meaning into the fact that more steel mills are now buying more Cutler-Hammer

Cutler-Hammer Three-Star Motor Control sets three new cost-cutting standards; installs easier, works better and lasts longer. Featured by leading machinery builders. Stocked for your convenience by your Cutler-Hammer Distributor.



Motor Control than ever before in history. Today's operations not only require the utmost dependability in motor control but provide the conditions which most clearly reveal it.

When you require motor control, always remember Cutler-Hammer dependability is extra value at no extra cost. Insist on Cutler-Hammer; experienced engineers everywhere do. **CUTLER-HAMMER, Inc.**, 1275 St. Paul Avenue, Milwaukee 1, Wisconsin. Associate: Canadian Cutler-Hammer, Ltd., Toronto.



ZINC: PROTECTOR...WORK HORSE...ACTIVATOR

When you water your house plants, open your car door, or switch on your flashlight, you make use of three of the unique properties of zinc.

Zinc's affinity for steel, plus its low melting point, makes galvanizing possible. In new, continuous-dip processes, sheets or strips of steel pass through molten zinc at speeds of several hundred feet per minute. The brief submersion leaves a permanent, thin, but tight, zinc coating that protects your watering can or garbage pail, steel sidings, roofing, gutters and downspouts... or an outdoor culvert like that shown above... from rusting.

A melting point far below that of iron and steel makes zinc ideal for die-casting, since low-cost steel dies are not damaged by the heat of molten zinc. Billions of small parts, die-cast, plated and polished with a minimum of costly machining, are the hardware accessories you find

on your automobile and many of your home appliances.

Zinc's high place in the galvanic scale is responsible for the efficiency of your flashlight. The battery is a simple zinc cell separated from a carbon electrode by an electrolyte. Voltage difference between the zinc and the carbon causes a current to flow when contact is established.

American Smelting and Refining Company mines and sells more zinc than any other company. And America uses more than 1,000,000 tons of the metal every year. ASARCO pioneered and developed the fast, low-cost strontium method of electrolytically producing low-lead, special high grade zinc for die-casting. Other major producers now use this efficient method under license from ASARCO.

Our refineries and laboratories are expert in the application of zinc and its alloys. We shall be glad to share our knowledge with you.

AMERICAN SMELTING AND REFINING COMPANY

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In Washington

• • •

Slow Motion Congress May Delay Work on St. Lawrence Seaway

A Congressional logjam threatens to slow down major planning on the St. Lawrence Seaway.

For practical purposes, the Seaway Development Corp. will be out of money by June 30 when the current fiscal year ends. Unless Congress acts on legislation authorizing the corporation to borrow another \$35-million, all major contract awards must be halted. Seaway officials are warning Congress that this might well mean a delay in opening the seaway as scheduled—1958 for shallow-draft vessels, 1959 for 27-ft. draft.

There's no doubt that Congress eventually will come across with the authorization. The House Public Works Committee already has approved it. But, by midweek, the measure had not yet cleared the House Rules Committee, which is necessary before it can even get a place on the legislative calendar. And the Senate Foreign Relations Committee so far has refused to hold hearings on the bill until after the House acts.

Seaway officials this week hadn't entirely abandoned hope of getting their measure through Congress before June 30, but the race will be close.

• • •

CAB Gives Airlines Right to Penalize No-Show Passengers

Airlines this week won their long fight to penalize passengers who fail to use or cancel seat reservations.

The Civil Aeronautics Board authorized domestic carriers to collect a \$3 "fine" from no-show passengers, effective Sept. 15. Penalties will be deducted from refunds on unused tickets.

To strengthen the airlines' hand in dealing with the problem the board had already issued two new regulations: (1) Effective this month, passengers generally are required to purchase tickets well in advance of scheduled takeoff time; and (2) effective next month, passengers holding reservations will be required to reconfirm their intent to use them by purchasing tickets six hours in advance of takeoff time.

• • •

Congress Gets Bill to Limit AEC's Spending Authority

A move is under way to establish direct Congressional control over the Atomic Energy Commission's subsidy programs for private reactor development.

Up to now, Congress has appropriated the funds in bulk and allowed the commission to share with industry as it sees fit the costs of research, development, and

construction of reactors for civilian purposes. Chmn. Clarence Cannon (D-Mo.) of the House Appropriations Committee has demanded that AEC be held accountable to Congress in advance.

This week, Chmn. Carl T. Durham (D-N.C.) of the Joint Congressional Committee on Atomic Energy introduced a bill that would force AEC to get Congressional authorization for each project before undertaking any financial participation. This is the way other spending agencies are required to operate. In the case of AEC, the authorizing group would be the Joint Atomic Energy Committee.

The Joint Committee also would have review power—with veto power implied, if not specified—over the prices AEC charges for leasing special atomic fuels to industry and over other waiver contracts under which the commission distributes the fuels cost-free for specified periods of time.

Prospects for the bill's passage are strong. The Joint Committee is practically solid in supporting it, and the AEC, while not enthusiastic, is understood to have agreed to accept it without opposition.

• • •

Federal Aid for Depressed Areas Gets Lost in Economy Shuffle

Federal aid for depressed areas is just about dead for this session of Congress. Chmn. Brent Spence (D-Ky.) of the House Banking & Currency Committee said he will not even call hearings on the proposed legislation this year.

Spence based his decision on the belief that such legislation would have no chance of passage even if voted out by his committee in view of Congress' economy mood. The Administration had asked a \$50-million loan program for areas of major unemployment; Democratic legislators from depressed areas proposed aid ranging up to \$300-million in loans and gifts.

A Senate Banking subcommittee held hearings on similar legislation some time ago, but no action was taken. Now Spence's decision makes it unlikely any attempt will be made to get a bill out of the subcommittee.

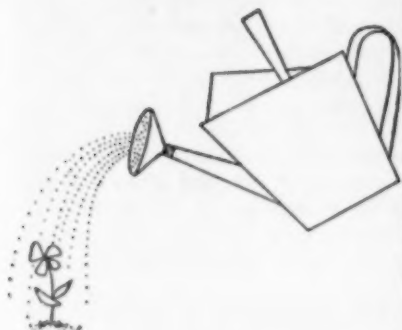
• • •

ICC Approves Higher Rate Scale for Retaining Freight Cars

Shippers who are unduly slow in loading or unloading railroad freight cars are going to have to pay more for their leisurely pace.

This week, in order to "improve utilization of equipment," the Interstate Commerce Commission approved higher demurrage rates for the retention of freight cars. The new rates call for charges of \$4 per day for the first four days after the customary two days of "free time" and \$8 daily thereafter, including Saturdays, Sundays, and holidays. Railroads had asked for a higher scale, up to \$10 daily. Present charges are \$3 daily for the first four days after free time, \$6 thereafter.

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business?**



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a better way
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Please let me see some typical Dodge Reports for my area. I am interested in the markets checked below.

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Area _____

Name _____

Company _____

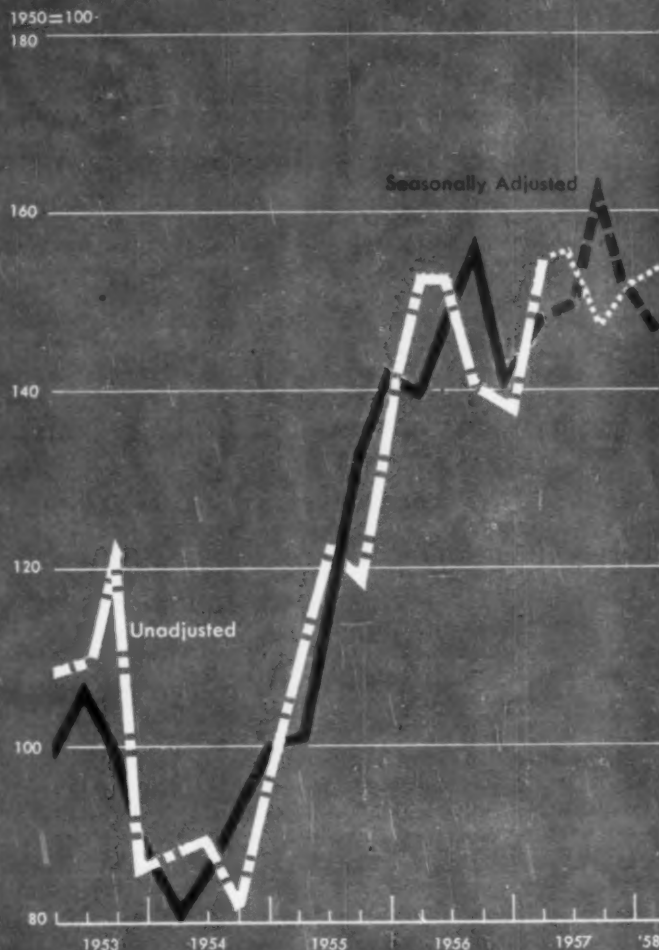
Address _____

City _____ Zone _____ State _____



CHARTS OF THE WEEK

New Orders for Machinery Except Electrical



Data: McGraw-Hill, Dept. of Economics.

New Gauge of Future Business

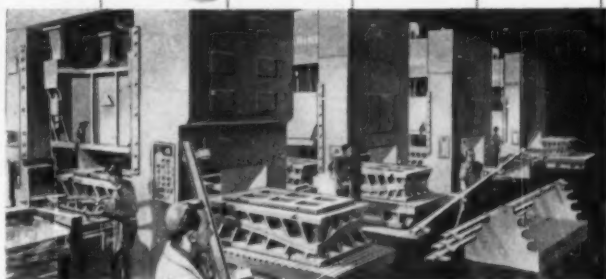
The charts on this and the following pages show the first publicly announced forecasts of new business based on the recently developed McGraw-Hill Index of New Orders for Machinery except electrical. The forecasts are by quarters for one year ahead.

For the last three quarters of 1957, as the chart above indicates, manufacturers of nonelectrical machinery expect dollar volume of new orders for their companies to surpass actual

bookings in the comparable 1956 period. The manufacturers also expect a fairly high first quarter in 1958.

This new gauge of future new business of capital equipment producers, and the index from which it is derived are prepared by the McGraw-Hill Dept. of Economics, with the cooperation of a large group of nonelectrical machinery companies.

The Economics Dept. prepared and tested such forecasts for over a year



What to do about the **Sales Up - Profits Down** problem

A NEW KIND OF AUTOMATION


Here's an automated answer to the profit squeeze. A press line like the one above can turn out completed parts automatically. A minimum of manpower is required and in-process material handling is entirely eliminated. This automated line is not confined to producing just one part either. In about half an hour the whole line can be converted—the feed changed, new dies set—to production of another run. As shown above, the new dies are set up outside the press. The press bolster rolls on wheels through the die area. Old dies out, new dies in place in a matter of minutes. Presses can be operated manually too. So here is full time or part time automation to meet the changing needs of daily production.

A new kind of automation? We should say many different kinds—a wealth of ideas to help you smother declining profits with greatly increased productivity. Find out about the new look in press automation. A call or letter to Clearing will start a friendly discussion of your problem. No obligation.

We are preparing a booklet on "The New Economics of Press Automation." Why not let us reserve a copy for you?

CLEARING PRESSES

THE WAY TO EFFICIENT MASS PRODUCTION

CLEARING MACHINE CORPORATION DIVISION OF **U.S. INDUSTRIES, INC.** 

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**ANOTHER New
HARTWELL
DEVELOPMENT**

**Large
Trigger-Action
FLUSH
LATCH...**



**for
gloved hand
operation**

The new large trigger line was designed for specific, heavy duty latching applications. The large operating trigger provides easy opening and closing even when operator is wearing heavy gloves. These rugged flush latches are made of stainless steel or coated cold rolled steel in various offset combinations for different door and frame thicknesses.

Another example of HARTWELL teamwork in the development of products to meet customer requirements.



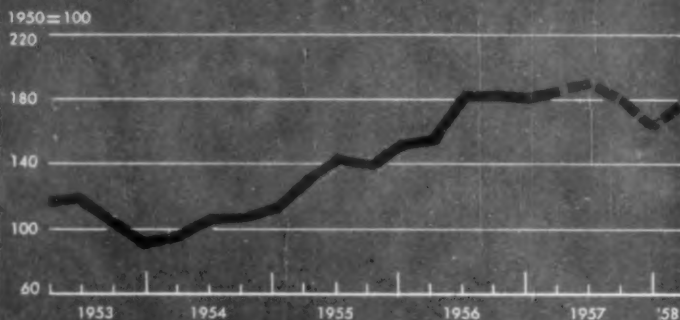
Complete specifications available upon request.

**WHAT ARE YOUR REQUIREMENTS?
Better take them to
"Flush Latch Development
Headquarters!"**



(Story starts on page 80)

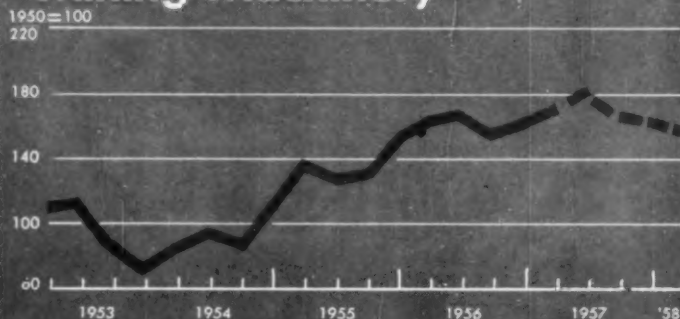
Pumps and Compressors



Engines and Turbines



Construction and Mining Machinery



Data: McGraw-Hill Dept. of Economics

to see whether they would prove useful for forecasters, before publicly releasing the results of the present forecast.

In the group forecasts making up the over-all results, five of the six machinery groups (shown in the charts

on these pages) predicted that new orders in last three quarters of 1957 would run ahead of a year ago by rates varying from 3% to 21%. Only pump and compressor manufacturers expect a decline, estimated at 2%.



FILTRATION

AVISCO
RAYON FIBERS

How RAYON does it fast, efficiently, and at lower cost than any other fiber

What makes rayon superior in performance yet lowest in cost for all types of smoke, air and liquid filtration?

Man-made—First of all, rayon is a man-made fiber. That means its physical properties can be manufactured to meet specific filtration needs. Fiber size, weight, roughness and length can be carefully controlled during production so that the finished filter is tailored to do the exact job for which it was created. Further, rayon can be "crimped" or bent into tiny waves that increase the number of filter traps.

Non-channeling—Next, a filter made from crimped rayon staple does not channel—that is, the fibers form a bar-

rier that keeps air, smoke or liquid from following straight paths.

Hooks and holds—The rayon fiber is rough-edged, too—tends to hook and hold passing impurities. Slicker fibers can't snag particles like rayon can.

Even-staining—Rayon stains evenly. This may be attributed only to high uniformity of filtration.

Controlled fiber length—The length of the rayon fiber is controlled, assuring better filtration at a steady, uniform flow. Uncontrolled lengths cause channeling and clogging, reduce efficiency.

Variety of densities—Most important, practically any filter density can be

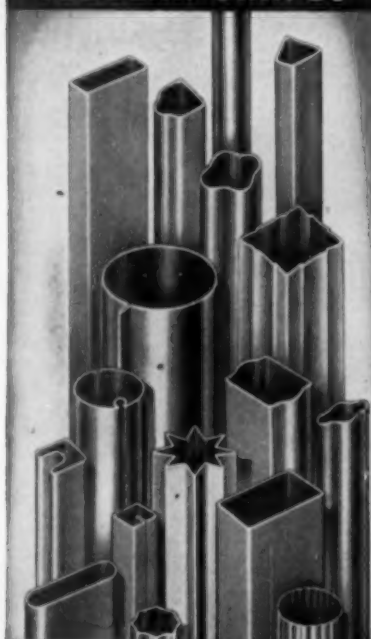
produced with rayon, due to the infinite webbing patterns possible with different deniers.

Low cost—All these superior filtering qualities come to you at lower cost than with any other filter fiber. Techniques for mass-producing rayon, developed over the past half century by American Viscose Corporation, make this low price possible.

Rayon filters simply cannot be matched for versatility, efficiency and low cost. We would be happy to show you further how you can use rayon filters for a more profitable business.

AMERICAN VISCOSE CORPORATION
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COLD ROLL FORMING TUBULAR SHAPES



Among the wide variety of things you can make on a Yoder Cold Roll Forming machine are round, square, oval, rectangular and other tubular shapes, such as illustrated. The seams may be open, lapped, butted, dove tailed, interlocking, etc.—as shown in the drawing.



Millions of feet of such unwelded tubular shapes are made from coiled strip for conductor pipe, bedsteads, lamp stands, window channel, wiring raceways, carrying rods, etc. Production ranges from 20,000 to 50,000 feet per day, with only one operator and a helper.

Yoder offers you the cooperation of their engineering staff for designing and adapting their cold roll forming machines, auxiliaries, and tooling, for the low cost production of structurals, mouldings and trim, panels, tubular and other shapes, to meet individual needs.

The Yoder Book on Cold Roll Forming is a complete, illustrated text on the art and the equipment needed for performing a variety of operations which can be combined with cold roll forming, at little or no extra labor cost. A copy is yours for the asking.

THE YODER COMPANY

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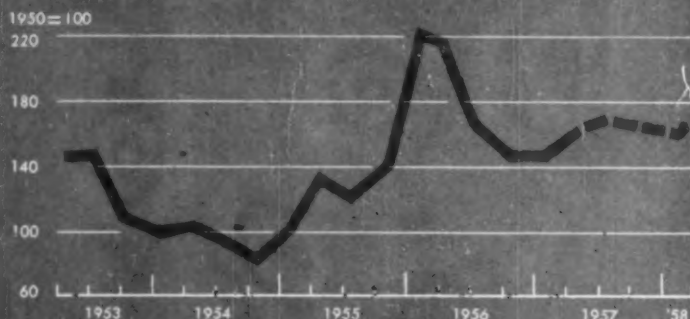
Cleveland 2, Ohio



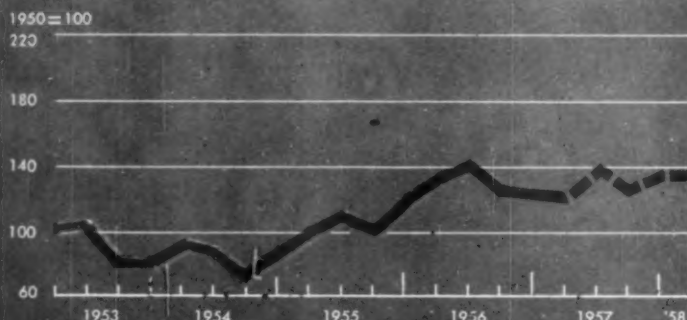
**COLD-ROLL
FORMING
MACHINES**

(Story starts on page 80)

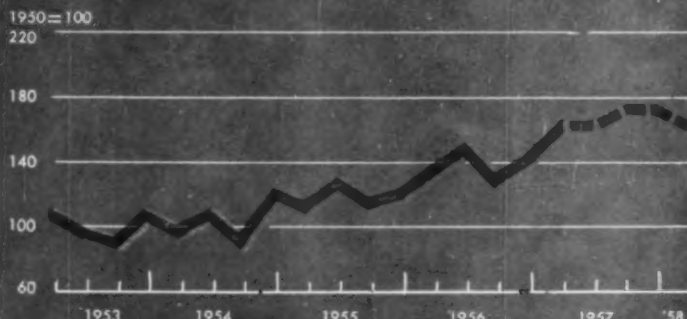
Metalworking Machinery



Other Industrial Machinery



Office Equipment



Data: McGraw-Hill, Dept. of Economics.

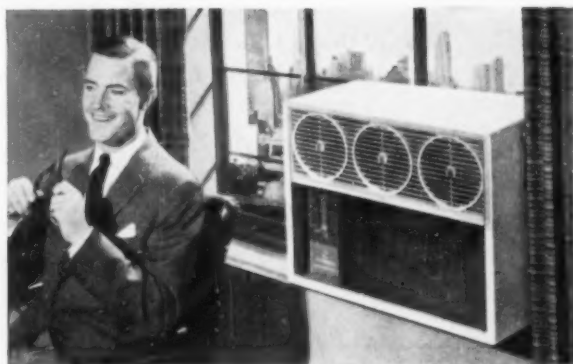
For the first quarter of 1958, three groups—makers of construction and mining machinery, pumps and compressors, and other industrial machinery—anticipate a slight drop from

a year earlier. Manufacturers of engines and turbines, metal-working machinery, and office equipment forecast first-quarter 1958 new orders will be up 15%, 5%, and 1%, respectively.

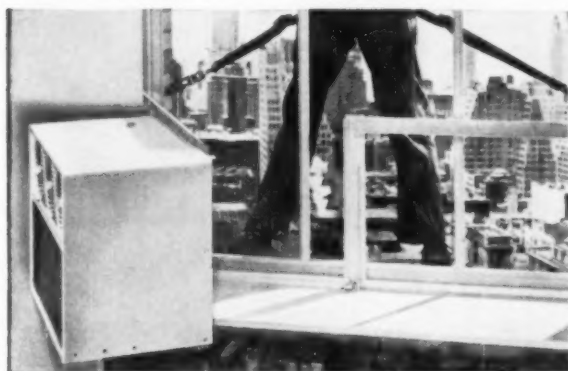
General Electric Thinline Air Conditioner has no unsightly overhang—inside or out



Fits in upper or lower half of any conventional double-sash window. The *Thinline* also fits all inside or all outside.



Fits casements, too—without altering or mutilating the window. Takes up $\frac{1}{3}$ less space than previous old-style models.



Swing-away installation of the General Electric *Thinline* makes windows accessible to window washers.



Fits through the wall, flush inside, no unsightly overhang, in old or new buildings. The *Thinline* is only $16\frac{1}{2}$ inches thin.

Here's why the ideal air conditioner for your home or office is the General Electric *Thinline*:

It's so compact (only $16\frac{1}{2}$ inches thin) that it fits almost any kind of window. Some *Thinlines* work on so little current that there's one to fit the electrical service you already have. *Thinlines* come in two models—the temptingly priced Custom and the even less expensive De luxe (shown here).

Custom *Thinlines* give you your choice of six cheerful spray-on colors. De luxe *Thinlines* come in $\frac{1}{2}$, $\frac{3}{4}$, 1 and $1\frac{1}{2}$ -hp., range from 5500 BTU's* to 13,350 BTU's.* Accessories include an electronic filter (at extra cost). General Electric Company, Room Air Conditioner Dept., Louisville 1, Ky.



Only $16\frac{1}{2}$ inches thin

New 1-horsepower *Thinline* works on 115 volts, packs a full 9000 BTU* cooling capacity. New $\frac{3}{4}$ -hp. *Thinline* works on 7.5 amperes, is rated at 6600 BTU's.* Both are De luxe models, at hard-to-resist prices.

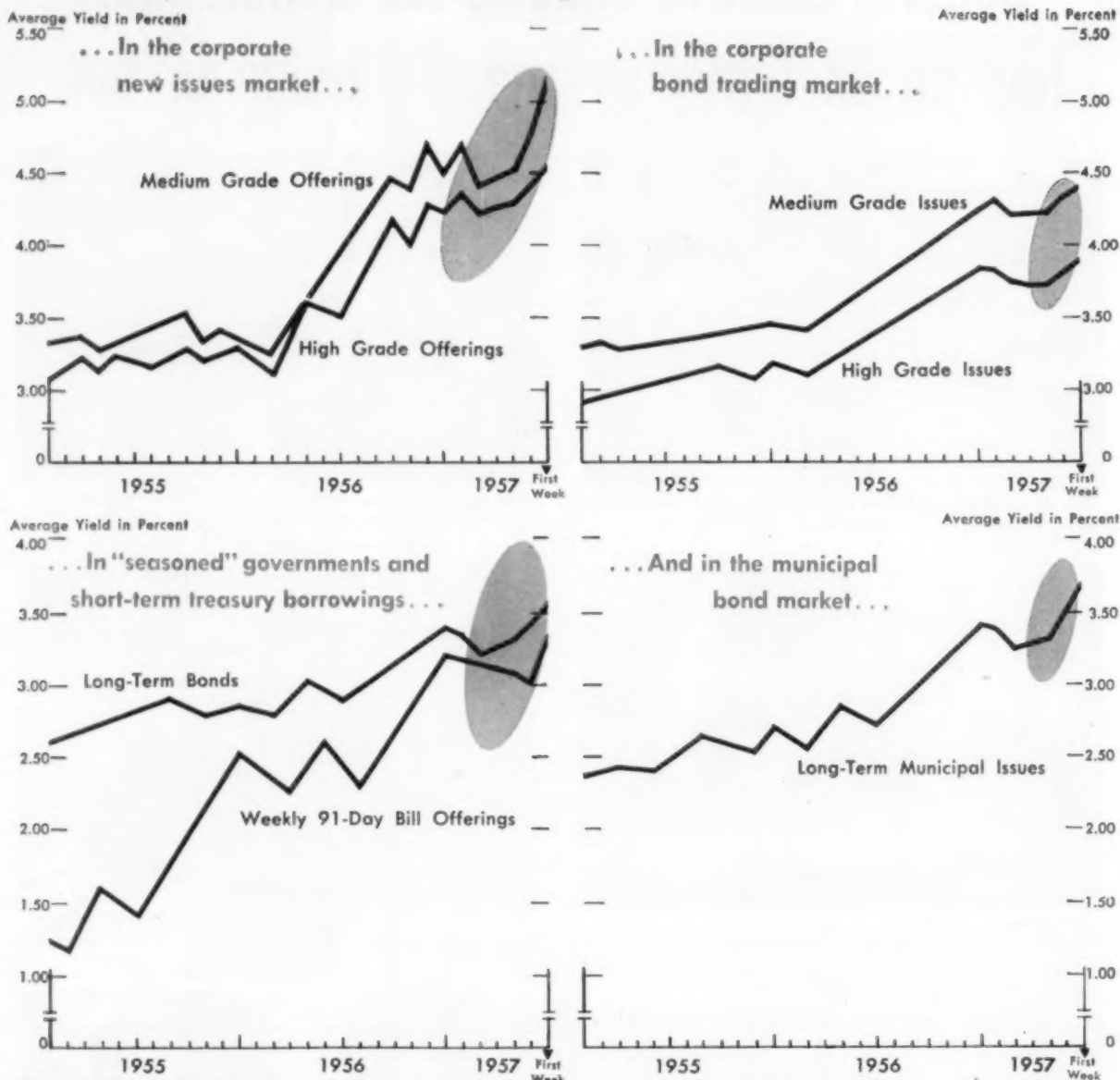
*Cooling capacities are tested and rated in compliance with ARI (Air Conditioning and Refrigeration Institute) Standard 110-56 and are stated in BTU's (British Thermal Units).

Progress Is Our Most Important Product

GENERAL  ELECTRIC

FINANCE

Yields Zoom to New Postwar Highs...



Putting the Screws on Borrowers

Yields climb steeply and the terms of borrowing increasingly close the escape hatch of refunding.

What's more, the national appetite for new capital shows no signs at all of being slaked.

THIS SPRING the national money market has been in the tightest squeeze in something like a quarter of a century.

Take a look at these rare phenomena of finance:

- The Treasury last week had to pay an average rate of 3.37% on its weekly offering of 91-day bills. That's the highest rate on short-term borrowing that the government has had to pay since the bank holiday early in 1933

upset the whole structure of money rates.

- Many of the longer-term government bonds have edged down in trading to the lowest prices since they were issued; one issue went down so far that it offered a grandiose yield of 3.67%.

- High-grade, long-term utility bonds have recently been floated to the public at prices that offered yields topping 4.50%—one AA-rated issue actually offered 4.78% this week. Medium-grade long-term bonds have offered yields around 5.50%. In all



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Three simple words . . .

But they mean so much, for nothing is more personal, or contributes more to your daily living than the telephone.

To a busy woman, the telephone means convenience and time saved. To a businessman, speed and efficiency.

Wherever you are, whatever you do, your telephone adds immeasurably to the pleasure and business of living. Use it more.

One phone to a home is no longer enough. One of the handiest places for an additional telephone is the kitchen . . . the most popular kind is a wall type in gay color.



GENERAL TELEPHONE SYSTEM

ONE OF AMERICA'S GREAT COMMUNICATIONS SYSTEMS • 260 MADISON AVENUE, NEW YORK, N. Y.

Immediate delivery from 150,000,000 standard items in Stainless, Monel, Aluminum, Brass, Bronze, Copper!

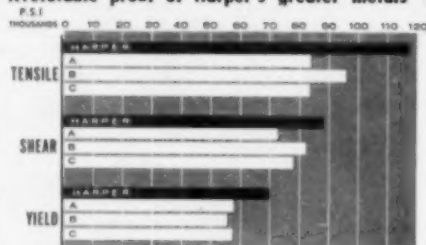
Thousands of Harper corrosion-resistant fastenings are in Harper Distributor stocks across the country! Even more thousands are continually on hand at The H. M. Harper Company for your convenience! A phone call to your Harper Distributor will do the trick! Why shop? Why wait? For immediate delivery, specialized service—call your Harper Distributor now!

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HARPER

Irrefutable proof of Harper's greater metals' strength shown by laboratory test!



An important point in buying fastenings is strength. Independent laboratory tests*, utilizing Stainless Steel Machine Bolts by Harper and three other leading producers, prove Harper superiority in Tensile, Shear, and Yield Strength. The chart at left shows the actual results of these tests. For complete information on these important tests, request Form No. 126.

*By R. W. Hunt Laboratories

grades, such bargain terms haven't been seen in the new issues market since the early 1930s.

- Municipal bonds are selling at their lowest prices since 1934—and of course at their most liberal yields. And that despite the tremendous advantage that their tax-exempt status offers to many investors via the income tax.

- Commercial paper rates have also climbed to their highest rates since the 1930s, reaching 3½% for prime four-to-six-month notes of the biggest industrial borrowers and going clear up to 4½% for lower-rated corporations.

Startling as they are, prices and yields do not tell the whole story of the money squeeze; borrowing terms, too, have been hardening steadily as the nation's lenders settle themselves more firmly in the saddle.

- **Refunding**—Historically, borrowers who were hit for high rates during periods of tight money have quickly eased their pain when rates began to drop, by refunding the old bonds with new issues that bore the new and often considerably lower coupon rates. But no such solace will be available to them if and when the present squeeze ends, at least not to the extent of the good old days.

That's because more and more lenders have been making sure that the juicy yields they are buying will stay put for a long time. The word is out that the lenders are interested in few new bonds whose terms permit quick refunding whenever market conditions permit.

As a result, the indentures of many recent issues either absolutely forbid redemption during the intermediate term, or else permit it only on payment of an extra-stiff premium.

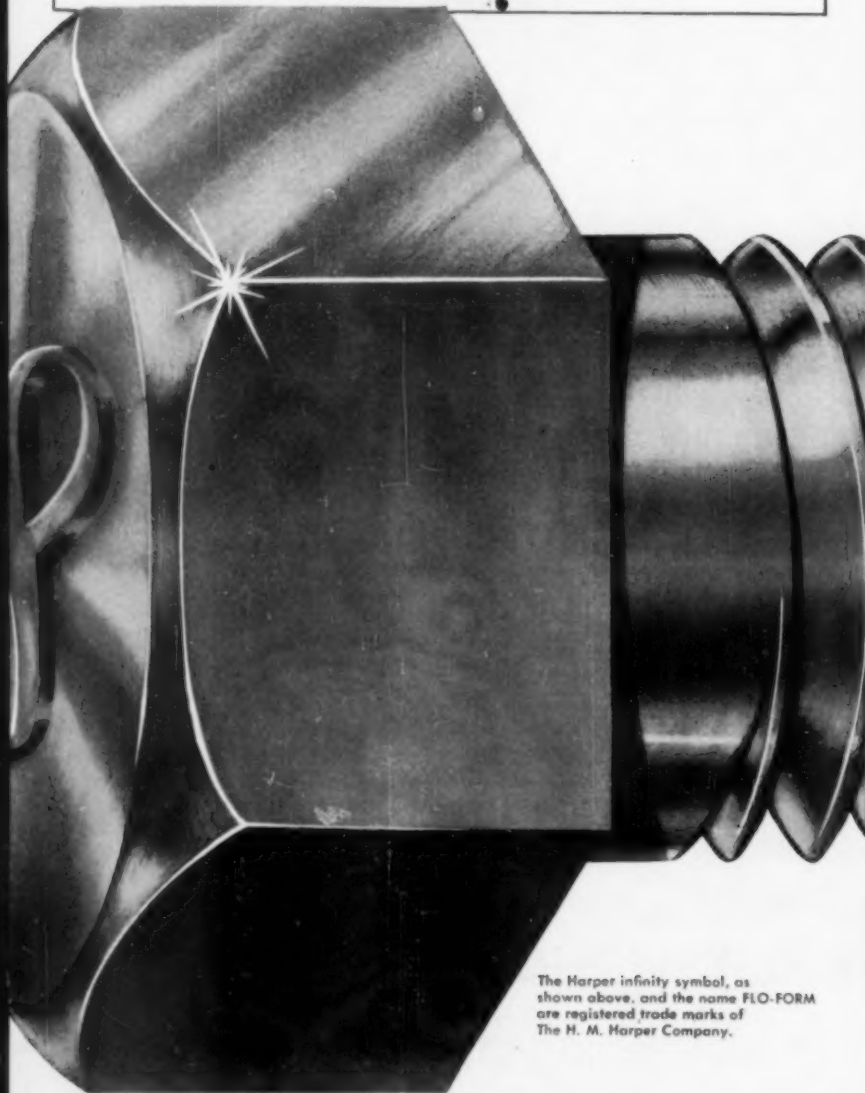
- **Effects**—Two key questions emerge from the composite picture that is made up by many news items about the money squeeze.

- How long is the squeeze going to last?

- How much damage has it done to corporate financing plans, and how much more will it do?

As for how long the squeeze will last, most experts in the money market have been reluctant to crawl out on any prophetic limbs—a reluctance that has been noticeable ever since the squeeze began to be felt in earnest (BW—May 4'57, p157). This caution springs from the number and variety of the factors that—acting both individually and collectively—have brought about the rise in money rates.

Two of the most active of these factors have been the anti-inflation policy of the Federal Reserve Board and the unprecedented peacetime appetite for new money in the whole nation—federal and local governments, corporations, and just plain people. As of now, few



The Harper infinity symbol, as shown above, and the name FLO-FORM are registered trade marks of The H. M. Harper Company.

experts expect the Fed to do anything to ease money rates generally as long as this appetite remains gargantuan—but the Fed could act at the drop of a hat.

There's nothing on the horizon to indicate that the national appetite for new capital is anywhere nearly sated. Bond issues in the next few months won't necessarily duplicate the \$7.8-billion record set in the first five months of 1957, but they are unlikely to ease off to any significant degree. Take a look at these portents:

Corporate issues of bonds and preferred stock to the tune of \$2.1-billion are either definitely slated for near-term offering or else are all but ready for sale to the public in the next few months.

Local governments have an even more impressive mass of financing deals on the fire.

The Treasury will soon have to engage in huge new-money and refunding operations. And it's to be noted that the Treasury's latest refundings haven't always been simple "rollovers"; in the most recent, 28% of the maturing bonds actually had to be paid off in cash, although the new bonds offered in exchange bore the highest rate in 25 years for this type of security.

• **The Impact**—Up to now, the money squeeze has had no really serious effect on the economy. But many observers are worried (BW—Jun. 8 '57, p. 35), and these isolated signs of trouble popped up last week.

• The state of Louisiana withdrew a planned offering of \$15-million in veterans bonus bonds due to "unfavorable market conditions."

• Port Arthur, Tex., rejected as "too high" all bids from underwriters on \$2.9-million school bonds.

• Southern California Edison withdrew a \$30-million offering of new preferred stock, because of the cost involved and will issue bonds instead late this month. (Bond interest, unlike dividends on preferred stock, can be deducted as a business expense in computing taxes.)

• There will be no further sales of issues by local housing authorities until after Labor Day "unless there is a very substantial improvement in the market for tax-exempt bonds," according to Public Housing Administrator Charles E. Slusser. Until Slusser made his announcement, Streeters had been expecting some \$40-million in local housing offerings this summer.

As for the underwriters, they have taken a real shellacking in the past few weeks. A lot of "sour" deals are still perched on their shelves, as the result of costly failures to figure out the price and yield that insures a quick sale to the public.

• **Telephone Issue**—A notable example is a \$70-million bond financing by the



HARPER

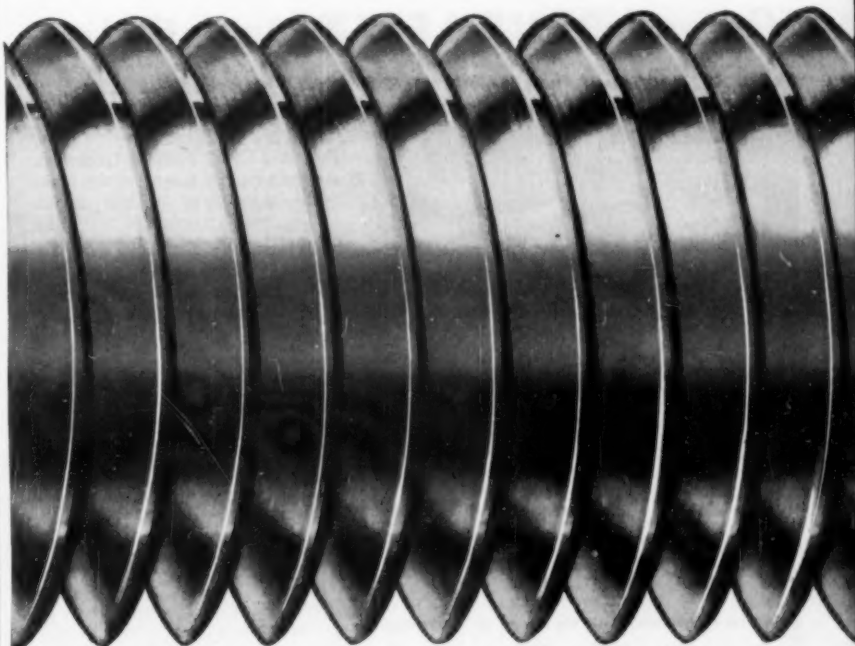
CORROSION-RESISTANT
FASTENINGS

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June 6, 1957

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Purchase Order filing at Grumman Aircraft had increased to the point where more than 200,000 manila folders were crowded in 550 filing cabinet drawers, averaging 400 folders to the drawer.

But the obvious answer, "buy more filing cabinets," was not the right answer.

Instead, Oxford filing experts were called, and the new Oxford Pendaflex Middle Digit system was installed, with these gratifying results:

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New York Telephone Co. The underwriting group that on May 21 bought the issue in competitive bidding soon found it had an impossible selling job. Last week the syndicate was dissolved with a reported two-thirds of the offering still unsold. When the bonds were permitted to seek their own level in a "free" market they promptly dived about three points below the original offering price of 101½% of par.

The cash loss to the underwriters had to be heavy. And there is increasing comment in the Street that a few more such misadventures could seriously impair the ability of underwriters generally effectively to handle the approaching flood of new issues.

Unhappy Bankers

They're objecting to life insurance companies' plan to collect customers' premiums by pre-authorized check.

Banks and life insurance companies are intensifying their clash over a plan to collect insurance premiums by drawing on the policyholders' checking accounts (BW-Oct.27'56,p72).

Under the plan, a policyholder authorizes his bank to honor monthly checks submitted directly by the insurance company. This eliminates premium notices and receipts and a lot of clerical work. The plan is now in use by about 70 life insurance companies, under consideration by 35 more.

Some 8,000 banks and bank branches are currently cooperating, but the American Bankers Assn. says many don't like it. Almost 90% of U.S. banks surveyed in 1956 were against the plan. The bigger banks accepted it out of a sense of obligation to their big life company depositors, says the ABA Bank Management Commission, and most of the rest followed along for competitive reasons.

• **Foot in Door**—Now the ABA is afraid the plan will spread to other industries. Says an ABA spokesman: "Now that the insurance companies have their foot in the door, everybody from department stores to undertakers wants to do the same thing." Some banks have reportedly given way to these pressures already. In the case of the insurance companies, however, J. McCall Hughes, vice-president and controller of Mutual Life Insurance Co. of New York, claims the demands of customers—not the companies—have been responsible for the plan's growth.

Another ABA fear is an increase in bounced checks, because the plans don't provide for notifying the customer when the check is drawn. But the Institute of

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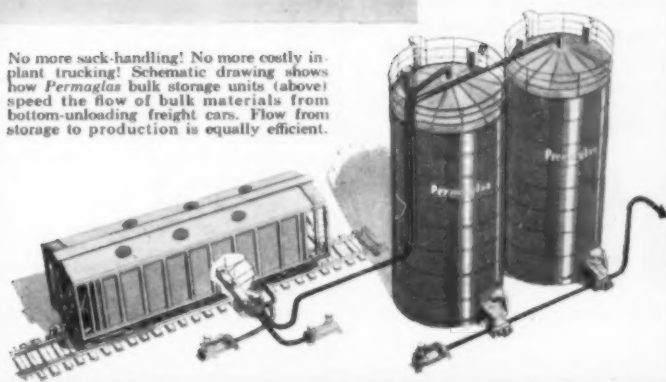
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Write for free copy of the "Ways and Why" modern manufacturing and processing plants are using A. O. Smith Permaglas mechanized storage units.



No more sack-handling! No more costly in-plant trucking! Schematic drawing shows how Permaglas bulk storage units (above) speed the flow of bulk materials from bottom-unloading freight cars. Flow from storage to production is equally efficient.



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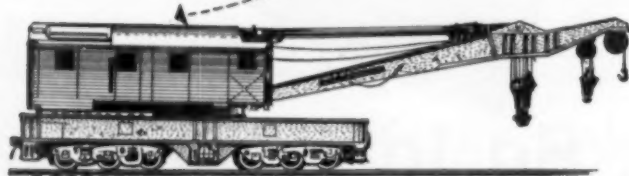
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BROWNHOIST

Life Insurance reports no indication of a rise in overdrafts so far, and Hughes says that of 15,000 pre-authorized checks deposited in March by two big New York life companies, only 25 were returned because of insufficient funds.

The banks worry, too, over costs if the plan spreads widely. Automation of check handling (now done manually for the most part) is only a few years off (BW-Mar.30'57,p105), but the ABA thinks large numbers of pre-authorized checks might be a major stumbling block, because of the special handling necessary. The life companies retort with the claim that their plans have been set up so that special handling won't be needed.

FINANCE BRIEFS

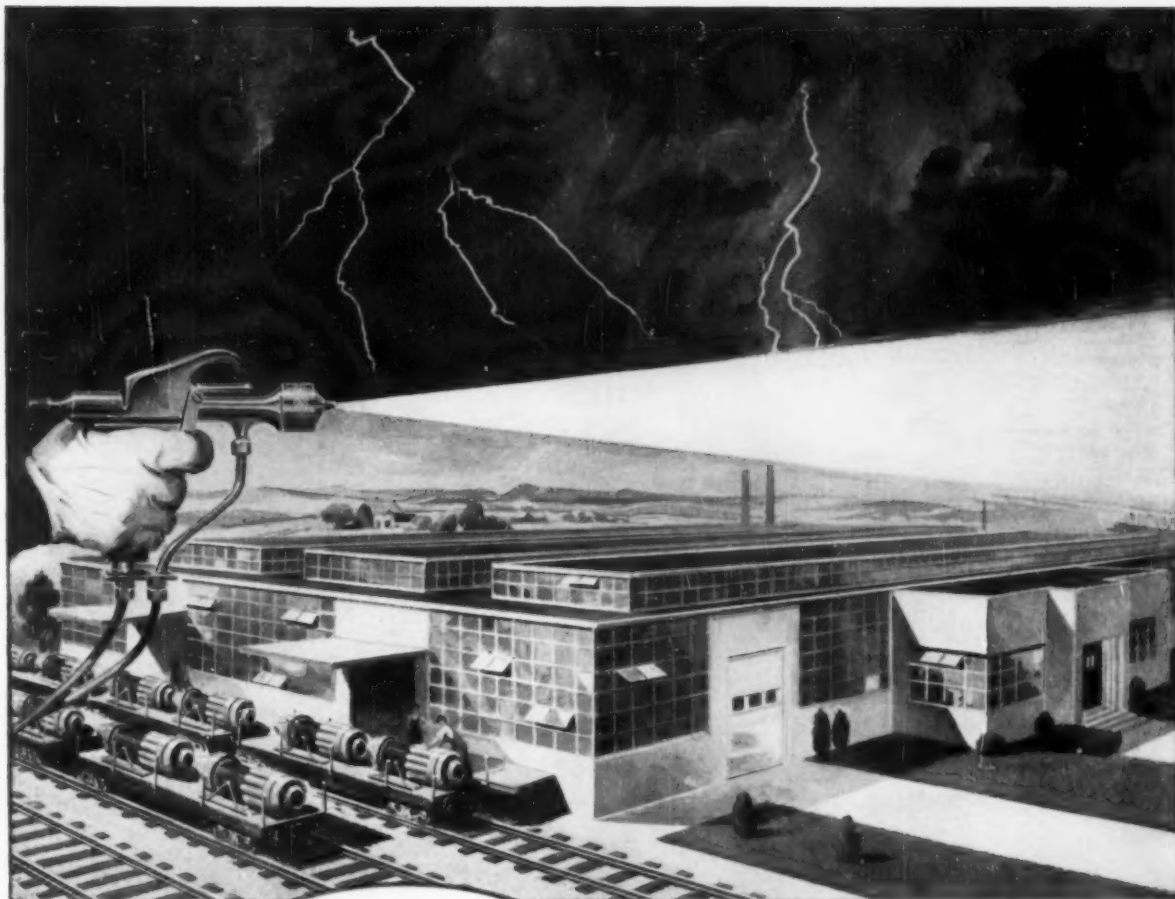
Oil industry expansion will require a record \$60-billion outlay over the next five years, Augustus C. Long, Texas Co. chairman, predicts. About half of this will be spent abroad, primarily in the Middle East. Presently, U.S. reserves are equal to only 11 years' demand.

A revolutionary trading floor is being planned by the Toronto Stock Exchange when it moves to its new quarters. The floor will be circular, with trading posts placed around the outer rim. Phone booths will go in the center. Individual quotations will be projected on the walls, visible to all.

The first big savings bank in Manhattan to boost its rate on deposits to 3 1/2% is the Central Savings Bank, following the lead of several Brooklyn banks. The increase will put these savings banks ahead of the commercial banks that have lately gone up to 3% (BW-Jun. 8'57,p54).

The Cuban-American Sugar Co. was enjoined by a Federal Court from voting its stock in American Crystal Sugar Co., on the ground it was violating the Clayton Antitrust Act. Cuban-American, a holding company, owns 23% of American Crystal's stock; and its wholly owned subsidiary, Colonial Sugars Co. was held to be a competitor of American Crystal.

Federal Trade Commission has no jurisdiction to regulate the insurance business in states that have their own regulator laws, the U.S. Circuit Court of Appeals ruled. The National Casualty Co. of Detroit had appealed an FTC order to cease certain advertising practices.



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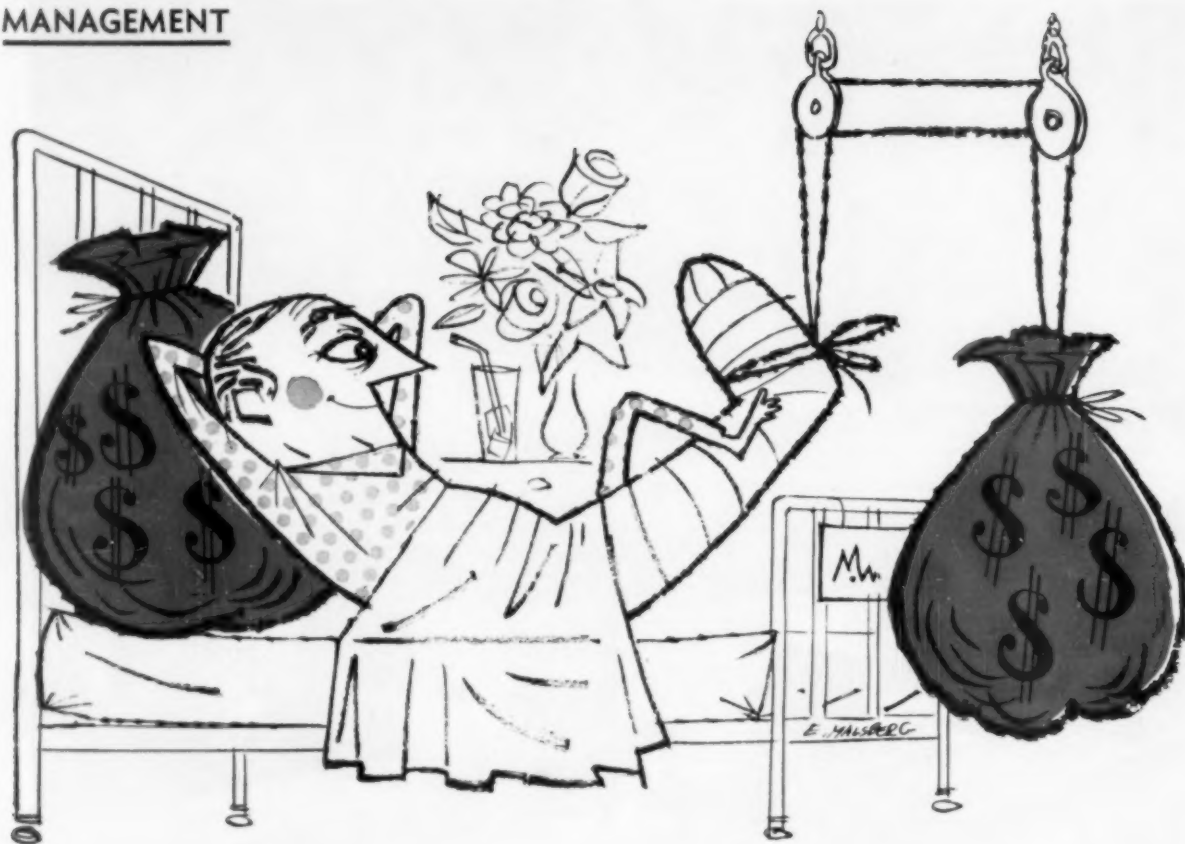
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Sickbed Bonanza From the Boss

Not all ailing workers do so well as the patient above. But companies are so generous with sick pay that—with tax loopholes and insurance—lost time can be almost profitable.

THANKS to a happy combination of company sick pay policies, medical insurance, and the tax laws, the man in the cartoon above may be making more money nursing his broken leg than he would on the job. If his employer—like many today—retains him on the regular payroll despite the absence, up to \$100 weekly of his salary becomes tax exempt after the first week. And if medical insurance—company or personal—is sufficient to pay doctor and hospital bills, he may well end up with more take-home pay than his colleagues who never miss a day's work.

This is a startling change from 30 years ago. The accepted motto then was "no work, no pay," and the workingman was expected to save a little something for just such emergencies. True, a company sometimes supplied financial help—often generously—and kept the job open until the patient recovered. Or fellow workers might take up a collection for a sick employee, and

the company might chip in. But in both cases it was entirely on the employer's own volition.

Now it's cause for comment if a company doesn't have some formalized plan for compensating sick employees. Partly, this is because tax credit on sick pay won't be allowed unless the company has a stated policy on the subject. As more and more employees avail themselves of the tax benefit, more and more companies have to spell out their policies. This is something they don't always relish.

I. How It's Done

In a survey of companies across the country, *BUSINESS WEEK* reporters found many proud of their sick pay plans and willing to discuss them in general. But on details they were shy.

• "It's a highly personal matter between the company and individual workers," says one.

• "We don't want to bind ourselves publicly to any one policy," says another.

• Other companies are afraid liberal provisions of a plan might be abused if too widely known.

• Employers fear, too, that sick pay matters—now under their discretion—might be introduced into bargaining sessions by the unions.

• One boss explains his reticence this way: "Some people wouldn't understand why a company treats salaried people differently than it treats hourly people."

To be sure, some companies do reveal their plans in complete detail. A few even make official announcement that they treat all employees alike. In practice, though, the trend is toward two sets of plans—one publicly proclaimed, the other practiced. And the latter is usually more flexible.

• **Admitted Inequality**—What this boils down to is that most plans are discretionary. For instance, an electronics company will frankly admit, in private, that it coddles research personnel. "It would be ridiculous for a company to get hard nosed with these



WEEKLY WASH RITUAL—BUT HE PROBABLY HASN'T CHECKED HIS BRAKES SINCE HE BOUGHT THE CAR!

You wonder what it is that makes people apathetic to real danger. We kill forty thousand people every year on the highways of America, so we get the car washed every weekend but never think of checking the brakes. Shrug your shoulders and call it human nature, but it just doesn't make good sense.

The braking system on cars today is a marvelous mechanism when you consider the millions of times it brings you to a sure, safe stop. But it does need regular care, tune-up and overhaul for maximum safety. Brake

power, like engine power, may run down a little at a time, so that the danger point is reached before you are aware of it.

Too much pedal travel (the pedal going to or almost to the floorboard) is a danger signal. Perhaps the brake lining is worn and should be replaced; or perhaps the brakes need adjustment; or the brake fluid level may be too low or fittings and parts of the hydraulic system need tightening and checking.

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signed the four-wheel braking system used on most cars today. We invented the popular Bendix* power brake used widely on cars and trucks. Quality Bendix-Eclipse* brake lining goes on more new automotive vehicles than any other make. So we speak with authority when we say that your brakes will do their job if you treat them with a little care. Patronize reputable dealers. Avoid the cut-rate shops. Get regular inspections every few thousand miles. It's the lowest cost insurance you can buy.

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people, as precious as they are," says an official.

There are as many different sick pay plans as there are companies. In big companies, fringe benefits almost always include hospitalization insurance and sick pay. In most instances, there's a triple set of rules—one for hourly workers, one for salaried employees, a third for executives.

- For hourly workers, the plan usually prescribes specific benefits hammered out in union negotiations and regarded as "rights" by workers.

- For salaried and executive personnel, there's usually a base plan beyond which managers may grant extra benefits, depending on years of service, value, and rank.

- **Clock Punchers**—It's common for hourly workers to draw no sick pay for the first week off the job. Thereafter, the pattern varies. One national manufacturer with more than 100,000 on the payroll allows half pay for six months, from an insured fund. A big Pittsburgh metals company pays \$46.50 a week for 26 weeks. Eastman Kodak Co. uses a formula based on length of service. For the first three months with the company this works out to half pay for 20 weeks, with a \$40 weekly maximum; with advancing seniority the benefits accumulate to 26 weeks at 75% pay and another 26 weeks at 50%.

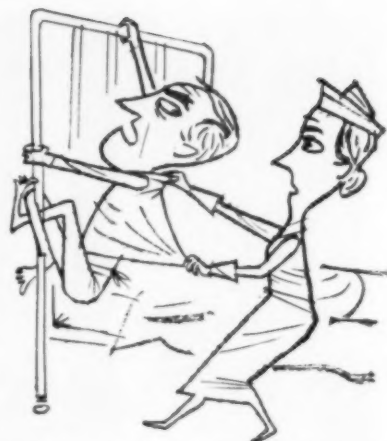
Lockheed Aircraft Corp., with 35,000 employees on the West Coast, gives hourly workers an annual sick pay allowance of six days. At yearend, the company pays each employee for whatever portion of this has not been taken—in effect, a bonus for good attendance.

Douglas Aircraft Co., Inc., has a somewhat similar scheme. Annually it pays an hourly worker a percentage of his earnings (about 2%) as sick pay. He gets the amount whether he has been sick or not, but he isn't paid for time lost as it occurs.

The Bell Telephone System, with 800,000 employees, compensates all personnel according to the same rules. In the first year, an employee is entitled to a week's sick time; after 10 years, he has earned 13 weeks at full pay, 39 more weeks at half pay. Sometimes, in special cases, a committee decides to supplement the compensation during half-pay periods, but the deadline is never extended. This goes for president and janitor alike, says one subsidiary.

- **The Salaried Staff**—Generally, a company's sick pay scales for salaried workers are more flexible. The salaried employee usually draws pay from the first week he is out, and he can count on full or half pay for periods varying according to his tenure and the company's opinion of his value.

For example, the Delco Appliance Div. of General Motors Corp. main-



"But Mr. Smith, you've been discharged."

tains a sick pay and participating insurance program under a formula that calls for one week at full pay for one-year employees, six weeks up to five years, and 13 weeks thereafter. However, there's also a fund from which, at its discretion, the company can continue sick pay much longer.

Some other sample programs:

- A major oil equipment producer in the East keeps salaried personnel on sick pay for six months.

- A Midwest utility, with 3,800 employees, pays office workers full salary for three months, half pay for another 11.

- A publishing company with 10,000 employees automatically gives two weeks with pay per year. In addition, two more weeks can be granted on the recommendation of a department manager, and company officers can approve payments for an indefinite term.

- **Top Brass**—You find the most flexibility—and also the most generosity—in sick pay for top executives. "By the time a man gets to the top, you know he is valuable," says one personnel man. "He is close to, and friendly with, the company heads and directors, and is naturally going to get considerate treatment." In the executive realm, it's not uncommon for a company to grant a year or more sick pay at full rates.

In private, many companies will agree that top officers and directors will seldom let a fellow executive suffer because of an official cutoff date on a sick pay program.

II. Paying the Bill

Nationally, prolonged illness is a hefty cost to industry, as the scope of some of these benefit programs suggest. After three years of study, the National Research Council for Economic Security estimated the annual cost to business at \$1½-billion. For the afflicted employees, the bill amounts to an average 13% of annual salary. Prolonged



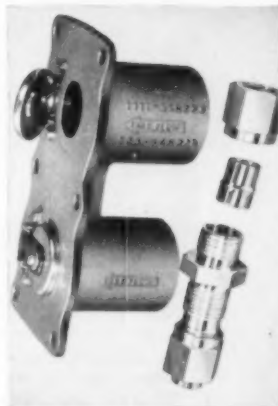
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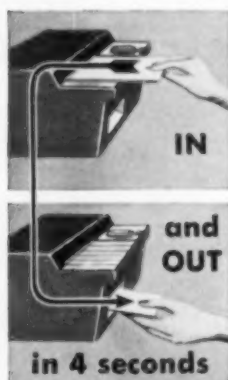
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illness strikes 39 out of 1,000 workers every year and keeps them off the job 10 weeks on the average.

But however costly the sickness, almost every company agrees that the patient gets his job back when he recovers. This holds true almost indefinitely. Actually, long-term illness isn't a major worry to employers—and they want employees to feel the same.

• **Nagging Nuisance**—Repeated one-shot absences, a day or so each in duration, are a much mightier headache.

In some instances, a certain amount of absenteeism is tolerated. One small company employs a man who gets "sick" after every extended trip. "It's homesickness—he just wants to be around home for a few days," says the company. "We discourage it, but put up with it." One of the big Boston insurance companies is similarly tolerant. The labor force in its home office is composed 65% of young female clerks, just out of high school. Adjusting to a full-time job often causes minor emotional problems, and Monday and Friday are somewhat popular days for short sicknesses. However, if absenteeism goes too far, it can be grounds for dismissal.

To control absences, most companies rely on immediate supervisors, who can usually tell who is really sick. Another method is to demand a note from a man's doctor if he's out more than a few days, to check him through the company clinic on his return, or to send a visiting nurse to his home to check on progress.

Despite all the advantages that can accrue to a man sick in bed, many companies think man-hour losses from illnesses are dropping. Few can offer specific figures, but the credit goes, they think, to the new policies of policing absences. **END**



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Middle Management Salary Boosts

Outrun the Rising Cost of Living

Middle management men are keeping ahead of the game—at least as regards to salary. The cost of living rose 3% last year, but middle management salaries went up almost twice as fast. The annual salary survey by the American Management Assn. showed that 6,000 middle rank executives in 239 companies fattened their pay checks by an average of 5.8%.

They didn't all get raises. About three-fourths of them did; and of these raises about half were for merit. One quarter of the total were companywide raises, while 7% followed promotions to new jobs.

AMA defines middle management as the executives somewhere between the top policymakers and the supervisors. A plant manager, a chief accountant, a regional sales manager, or a product development engineer would fit into this category. Their salaries would run anywhere from \$6,000 to \$15,000 a year in small companies, to \$30,000 in large ones.

To the AMA, a small company is one with less than 1,000 employees and less than \$10-million annual sales.

Company size is only one factor in the size of salaries. The pay of a plant manager tends to be related to production volume of his plant, that of a district sales manager to the volume of sales in his district. Geographical location does not seem to be a factor, says the AMA, except that in Canada, executive salaries run about one-fifth lower than in the U.S.

Bonuses, once thought of as a prerogative of top managers alone, have filtered down through the ranks. Some 45% of the middle management covered in the survey received bonuses last year. The fattest plums went to production and marketing executives, who did better than finance, purchasing, or industrial relations.

• • •

Paychecks Issued to Young Bankers

Catch Up With U.S. Industry Average

This year, for the first time, starting salaries offered by the nation's largest banks to college graduates are just about on par with the current over-all average for U.S. industry—\$382 a month. What's more, says the American Bankers Assn., banks are giving bigger and better raises. Average salaries for college graduates with 10 years in banking are now \$863 a month—against \$768 for industry as a whole.

Even so, says a college recruiter, the banks still have a bleak reputation to overcome. For years they have been unwilling to give competitive salaries to the new graduates—and for those few they did get, the rate of promotion has been notoriously slow. As a result, despite the pressing need for top-caliber personnel, banks have been losing out to more open-handed organizations.

The improvements to date are occurring only among the largest, most progressive banks. However, these are the pacesetters for the industry—and their pattern will probably be followed.

In the meantime, banks are turning to training courses to achieve better use of talent now available. For example, the Graduate School of Banking backed by the American Bankers Assn. is expecting a record turnout of 1,051 seasoned bankers from 46 states at its Rutgers University session this summer.

• • •

Researcher Is No Long-Haired Lone Wolf,

Two Research Chiefs Report

Research people cannot and should not be isolated from the rest of the company if their work is to have any real value, C. L. Fleming, Jr., vice-president and director of research for Esso Research & Engineering Co., and Lowell W. Steel of General Electric's research lab, told a group of industrial research directors last week. Research scientists rarely fit the stereotype of the genius who feels violently about the right to pursue subjects of his own choosing. Rather, said Steel, they are highly intelligent, highly trained individuals, with a sincere desire to contribute to the commercial success of their employer.

Nothing is more disheartening, said Fleming, than for a researcher to develop a new product or process, and then find that the company never had any intention of going into such an activity, or that the costs are too high.

• • •

Tighter SEC Rules on Stock Options

Likely After Appeals Court Decision

The rules applying to company stock option plans may be tightened as an aftermath of a U.S. Court of Appeals decision.

Under the Securities & Exchange Act of 1934, a company is entitled to recover any profits derived by officers or other insiders from purchase and sale of company stock within a six-month period. The purpose is to prevent profiteering by the inner circle.

However, under certain conditions, it's possible to bypass this regulation through the use of stock option plans, thanks to a special Securities & Exchange Commission ruling. Insiders can exercise options to buy stock at a discount, sell on a rise in price, then turn around to purchase more stock—again at a discount, and all within the six months. This can lead to abuses.

Now the Court of Appeals has questioned the validity of this SEC special rule. The decision came in a suit brought by stockholders of CIT Financial Corp., charging that six of the company's officers and directors had made money by buying and selling company stock under an option plan. The court held that because the defendants had acted in good faith under the SEC rule, they did not have to repay their profits. But it raised enough questions about the procedure to make revision of SEC regulations likely.



LONE STAR —the “steel mill in the pines” (of Texas, obviously)—makes 90% of its fast-booming sales in “oil country goods,” casing, tubing, pipe.



Texas Steel

Lone Star's steel plant (above) is staking its future on supplying the rough-and-tumble oil country around it—and profits have gushed out in a fivefold gain in four years.

EVERY LOAD of steel pipe—the mill makes only electric weld—gets the sign Pres. E. B. Germany is putting on here.



Mill Puts All Its Bets on Oil

LESS THAN 10 years ago, the War Assets Administration couldn't find anyone outside of Texas who'd bid much more than \$3-million for a languishing iron operation in the piney East Texas hills, 150 miles from Dallas—even though it had cost Uncle Sam 10 times that sum.

Today, the Texas-born Lone Star Steel Co., with its original wartime facilities now augmented by the modern steel plant you see in the pictures, can boast a pretty impressive record. Last year:

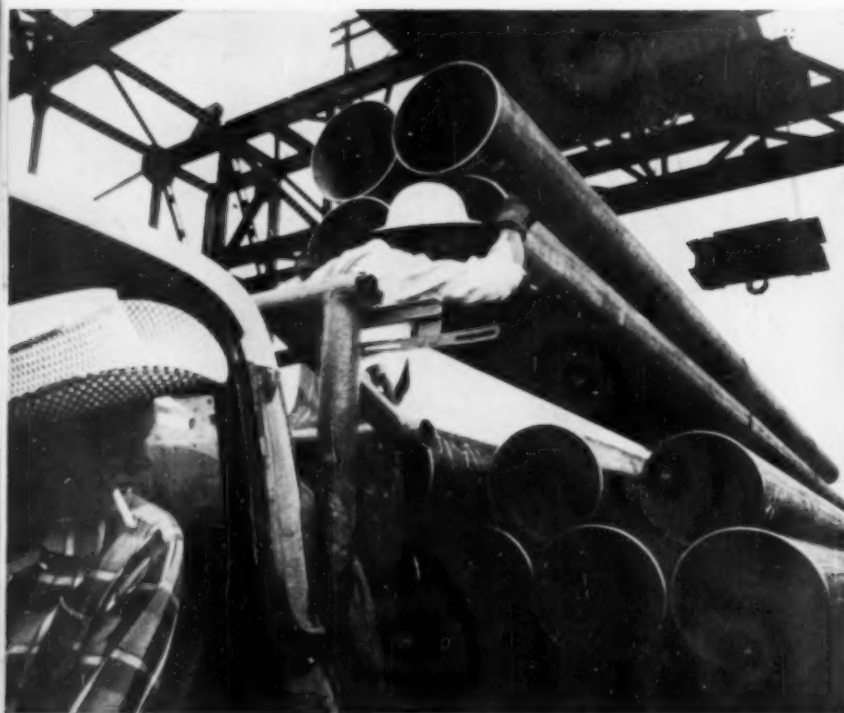
- Lone Star produced at 114.47% of capacity—the highest operating rate in the industry—against a national average of 89.8%.

- In net income per ton of ingot capacity, Lone Star was first among carbon steelmakers with \$18.46, more than double the industry average of \$8.64.

- Lone Star's net profit as a percent of sales jumped to 11.45% (third highest in the industry) from 7.39% in 1955. At the same time, the percentage for the industry dropped to 7.28% from 1955's 7.82%.

- The company's sales hit \$88-million, a steep climb from the \$27-million figure only three years earlier, when the steel plant's open-hearth shop was "put on the line" for the first time. Net income of \$10.1-million was almost five times 1953's \$2.1-million.

- **Maverick**—The company that has put on this performance is a sort of maverick of the industry. Though it's a fully integrated steel operation, Lone Star has deliberately put all its eggs in one basket. More than nine-tenths of its total income today comes from the

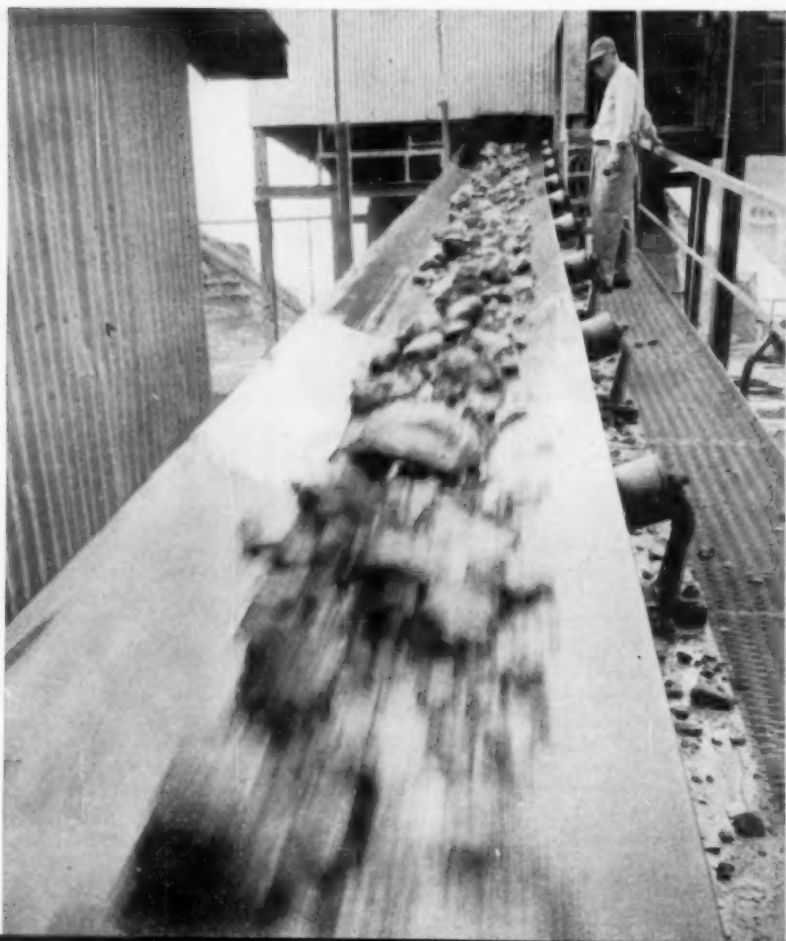


FAST DELIVERY

Contract haulers load pipe right at Lone Star mill; an overnight run reaches most of U.S. drilling rigs.

NEARBY ORE

It's low-grade, but cheap; beneficiation plant (through which conveyor belt is moving) upgrades it to 50% iron content.



LONE STAR starts on p. 104

sale of "oil country goods"—casing, tubing, and pipe. And in the battle between electric weld and seamless pipe, it has put all its bets on electric weld.

Lone Star has staked its bread and butter and its whole future on the rough-and-tumble industry that has made the words Texas and oil almost synonymous. So it's wooing its rough-and-tumble customers with a genial caricature of themselves—a symbolic figure that the company calls "Joe Roughneck" and bills as the "heart of the oil and gas industry."

• **Balance Sheet**—In the race for the oil goods market, Lone Star has a couple of solid geographical advantages: (1) It's set down right in the middle of its ore supply, and (2) its market literally surrounds the plant.

Of course, it's true that the ore is low-grade and has to be beneficiated; and the green, untrained labor available in the area was at first a handicap. On top of that, Lone Star has had to fight off the weight of a sizable debt; and life for stockholders has been barren of cash dividends. But Pres. E. B. Germany (cover) is so firmly convinced that Lone Star's future is soaked in oil that he's ready to put more money on the line to back it up. The company is engaged in an \$8-million expansion that will add, among other new facilities, a fifth open-hearth furnace.

I. Ore in Those Hills

Some observers say the "Eastern dudes" simply missed the boat on East Texas iron ore. At any rate, it took a group of East Texas merchants and a few sharp Dallas bankers to turn a sickly war orphan into one of the hottest operations in the steel business.

For more than 100 years, many people knew the rolling hills of East Texas made pretty poor farming country because there was too much iron in the soil. But if there was too much iron for farming, there didn't seem to be enough for iron making. Attempts during the past century to start up an iron business ended up on the rocks.

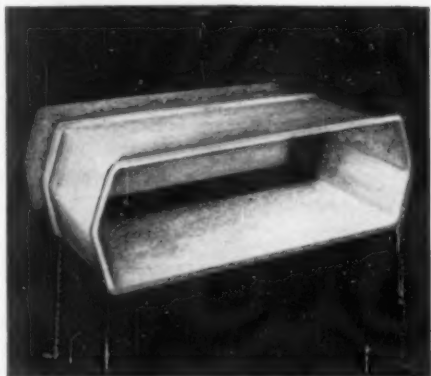
• **Wartime Spur**—But with World War II, iron came into critical demand, and a group of Texans, with typical enthusiasm, thought they saw a chance to do something with the ore. They arranged a deal in 1942 whereby the Defense Plant Corporation would build an installation (with the Texans putting up \$1-million), and Lone Star would operate it for seven years with option to buy. The plans called for an ore beneficiation plant, some coke ovens, a power plant, and a blast furnace.

• **Start in Life**—The war, and the iron emergency, ended before the installa-

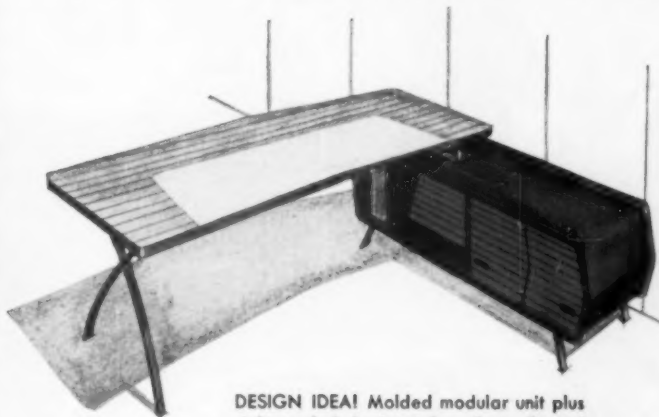


IDEAS for profits from Monsanto's "House of The Future"

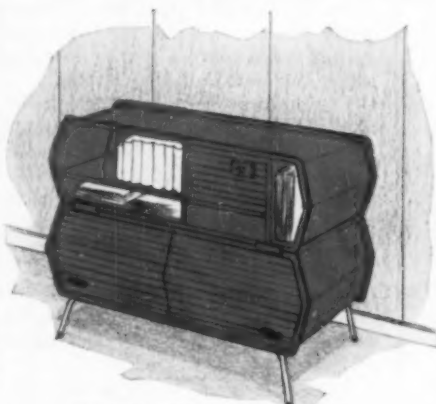
Modular office units of reinforced plastics



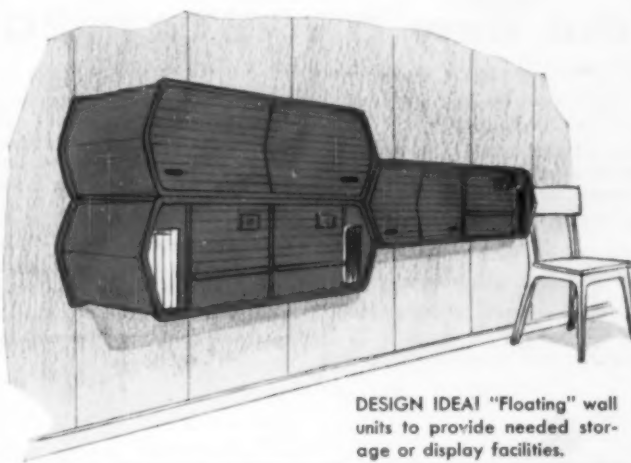
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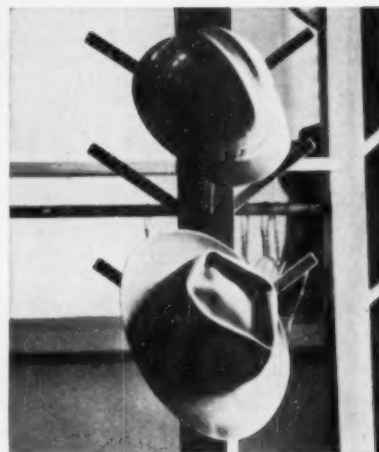
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STORY IN HATS—At Lone Star steel mill, Western headgear is as common as tin hats.

tion was completed. When the best outside bids for Uncle Sam's \$30-million white elephant barely topped \$3-million, Lone Star backers dug into their well-lined pockets and came up with a \$6.3-million bid that the War Assets Administration O.K'd.

The coke ovens and power plant were operating, and ore was being shipped, but the blast furnace was then only on a stand-by basis.

For a couple of years, the company produced and sold pig iron, then took its first major forward step by installing a cast iron pipe foundry.

During these years, Lone Star leadership passed from John W. Carpenter (now board chairman of Southland Life Insurance Co. of Dallas, and still a Lone Star director) to E. B. Germany, an oilman turned steelman. Germany, had started out in the unlikely role of high school principal, then switched to oil and successful wildcatting. He was one of the original backers and directors of Lone Star, and is still president at a vigorous 64.

• **Leap Into Steel**—With the cast iron pipe foundry running at capacity, and accounting for \$3-million of 1951's \$19.5-million sales, Germany and his associates were ready for the bigger push they had been preparing for.

A big leap into steel was the obvious move—and steel shortages, made more acute by Korea, provided the opportunity. The company was able to wangle a loan of \$50-million from the Reconstruction Finance Corporation, and the National Production Authority provided another \$37-million through second mortgage notes maturing in 1971. With this backing, Lone Star was able to build 550,000 tons annual steel-making capacity, including four open-hearth furnaces, a rolling mill, and two pipe mills. It began making steel in 1953.

• **Multiplication**—That's when sales



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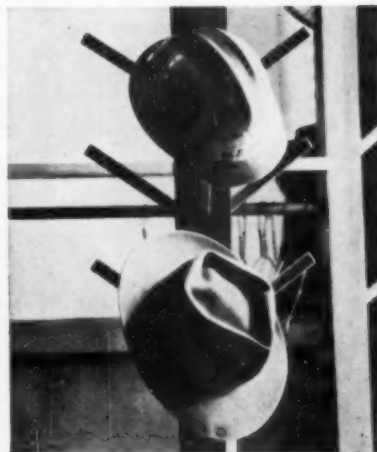
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figures started shooting skyward—and earnings followed along, after a slightly delayed take-off. Steel accounted for \$12.6-million in sales in 1953, \$25-million in 1954, \$62-million in 1955, \$77-million of last year's \$88-million total sales. Lone Star officials have their eye on \$100-million in steel sales alone this year.

At the beginning, a lot of production bugs in steel had to be worked out, and an absolutely green labor supply meant using two or three men to do the work of one. So in its first full steel year, 1954, Lone Star went more than \$1-million in the red. But net income jumped back past \$4.5-million in 1955 and hit \$10.1-million last year.

II. Placing a Bet

Oil industry people have hassled for years over the relative merits of seamless vs. electric weld pipe. Lone Star, under Germany's leadership, plumped for electric weld as "the most salable end-use product for us"—but only after exhaustive studies by its consulting engineers, A. J. Boynton & Co., and the consulting geologist firm of DeGolyer & McNaughton. Seamless has been around much longer than electric weld, but in the past 25 years electric weld has been gaining on it.

Here's why Germany figured it was smarter business for Lone Star to go for electric weld. All oil company pipe is sold according to American Petroleum Institute standards, and one of the most popular kinds is API's "J-55." Since it's suitable for any well that goes down less than 9,000 ft. and the great majority of wells today are to depths less than that, the greatest demand for casing is for J-55. In performance and price, electric weld J-55 and seamless J-55 are the same.

But when it comes to getting into the business, an electric weld plant costs less to build than a seamless mill, and cost of production is lower.

• Market—Beyond that, Germany fig-



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in clubs, hotels, fraternities



in stores, shopping centers



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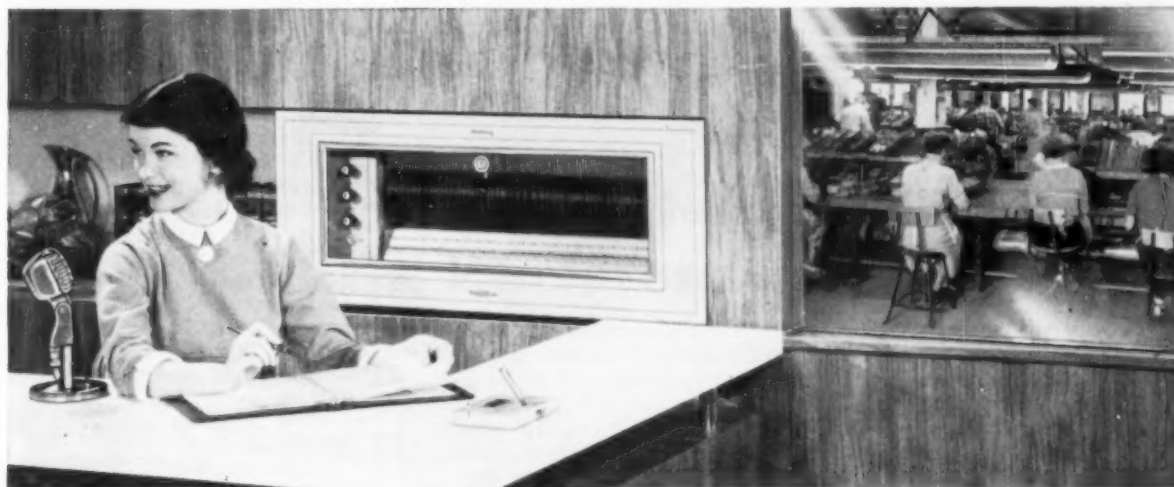
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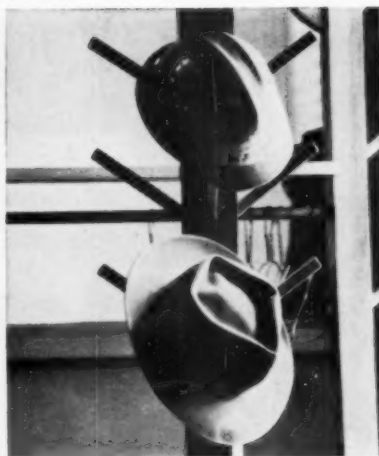
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ures it won't be too long before over-all U.S. sales of electric weld come up to a par with the older seamless. And since Lone Star's total capacity output now can't supply as much as 15% of oil industry demand for J-55 casing, he has no fears about future markets.

III. In Its Own Backyard

Despite the Texan ardor of its backers, and the easy accessibility of Texan ore, even Lone Star had a few qualms at the beginning as to whether the ore could be used profitably. It hired Kerr & Co., engineers of Los Angeles (certainly no spot for a pro-Texas bias), to make a detailed study.

Kerr & Co. came up with the categorical conclusion that Lone Star's beneficiation methods made its reserves "one of the lowest-cost supplies of iron ore remaining in the U.S." Lone Star has acquired some 56,000 acres of ore-bearing land in the area.

The ore is strip-mined, and as mined, it runs from 19% to about 25% iron. After beneficiation, iron content is raised to around 50%. That's close to the 51.5% standard that open-pit Mesabi range ore now has trouble reaching—though it lags behind the 63% of pelletized taconite or Jasper concentrate.

As for costs, Kerr & Co. found Lone Star's weighted average cost per long ton was \$3.05. At that time, ore with 51.5% iron content sold at lower Great Lake ports for over \$8 a gross ton.

• **Scrap**—As for scrap for the open-hearth furnaces, Germany says "we have this whole area to draw upon," and there's no trouble getting it at favorable prices and low freight costs. There's only one other user of scrap in that part of the country. Lone Star's ratio now runs normally at about 40% hot metal to 60% scrap. With technical changes to step up blast furnace capacity, plus the fifth open-hearth, it's expected to be 65% scrap.

• **Within Reach**—Lone Star also has



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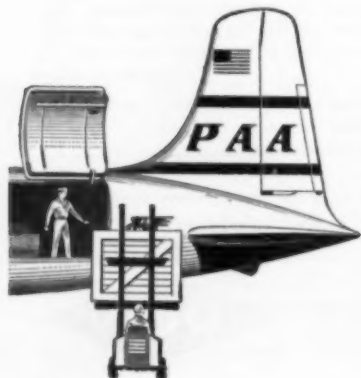
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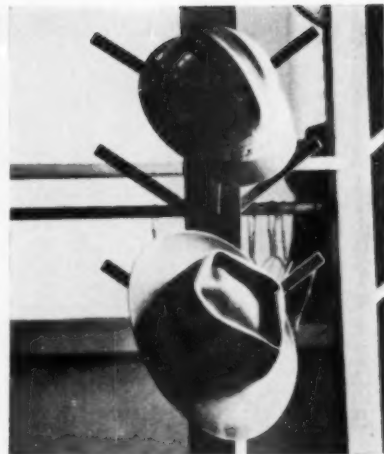
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extensive coal reserves less than 250 miles away in Oklahoma. It gets limestone from a Chico (Tex.) quarry, dolomite from Oklahoma, manganese from Mexico. The East Texas fields supply plenty of cheap gas for fuel.

Labor comes out of the East Texas hills, too—78% of Lone Star's nearly 5,000 employees are natives of the region. The rest are largely skilled supervisory personnel brought in from other steel centers to train the erstwhile farmers and stockmen.

• **Right in the Middle**—Lone Star's markets aren't quite confined to its backyard, but they, too, literally surround the plant at Lone Star, Tex. (offices are in Dallas). A year ago there were 2,712 drilling rigs operating in the U.S., and 2,241 of them were drilling in Lone Star's seven-state trade area. Roughly 83% of all wells drilled in the U.S. were within an overnight haul.

The advantages are obvious: "The plant's location in the center of oil activity," says Germany, "enables drillers to order months in advance, pick up their pipe on the morning of the day they need it, and have it in the well by nightfall."

There has been talk for years of Jones & Laughlin coming into Lone Star's "domain" with a 1-million-ton mill near Houston to produce seamless pipe. Germany professes to be unworried, says the oil industry will double its activities in Lone Star's sales area in the next five years.

IV. Rocks Along the Road

A total of \$87-million in funds from U.S. agencies—the amount Lone Star got from RFC and the National Production Authority together—is quite a hunk of cash, and might seem to take care of all financial worries. But it has its drawbacks, too.

For one thing, despite increasing profits, stockholders have yet to pocket their first cash dividend (though their shares have had a hefty rise on the



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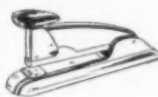
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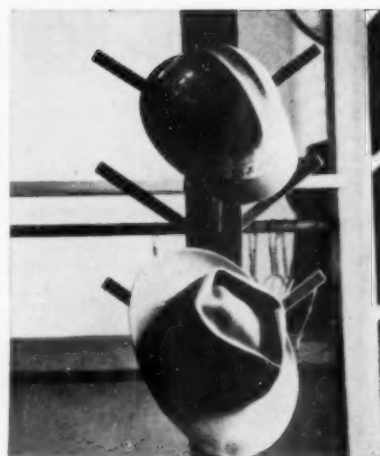


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over-the-counter market). That's because as long as the NPA loan is outstanding, the company can't pay dividends without government consent. In February this year, Germany did get permission to pay a stock dividend.

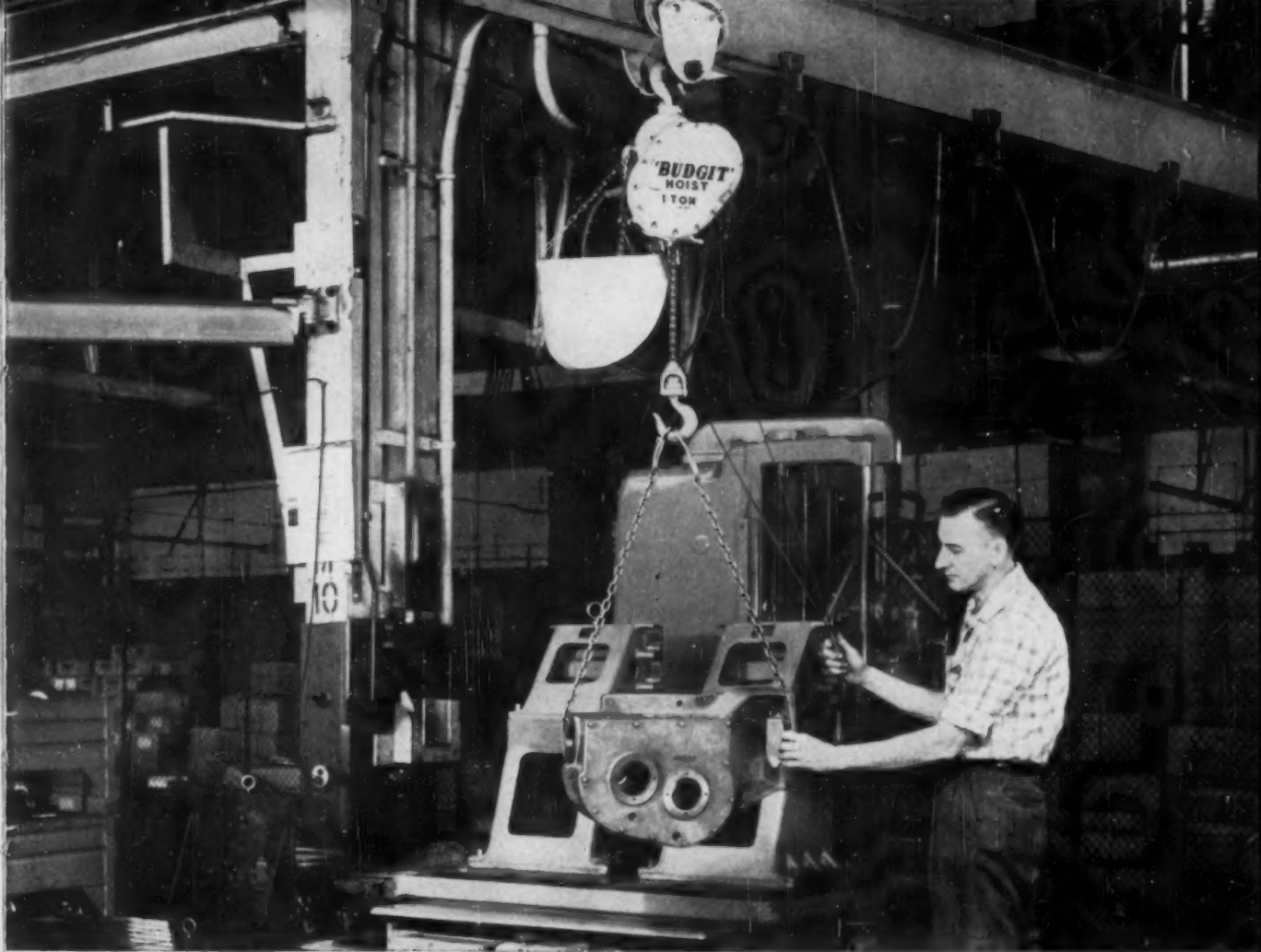
• **Weight of Debt**—For the past couple of years, Germany's toughest job has been fighting the company's sizable debt, which peaked at something more than \$88-million in 1954. Since then Lone Star has worked it down—it whittled off \$26-million in the past 15 months alone—but almost got itself in a bind in the process.

In 1954, when Lone Star's cash position was at its worst, it got an agreement with RFC for rescheduling loan maturities and releasing certain unused construction loan funds for working capital. At the same time Lone Star agreed that, if requested, it would refinance its outstanding indebtedness by issuing some securities RFC thought would be more marketable.

This agreement would have involved issuing up to 1-million shares of common by Mar. 1 this year, at \$9.50 a share. But when the time came to think about issuing this stock, the common shares had climbed to \$26—and 1-million new shares at \$9.50 would have upset the existing stockholders' equity. Lone Star's phenomenal sales climb, however, enabled it to get off the hook by anteing up \$7-million in cash by Apr. 1 to pay off part of the debt and make the stock issue unnecessary. Now the financial prospect looks smoother, and expansion to enlarge Lone Star's slice of the market in oil country goods is well under way.

• **Ahead**—Present schedules call for having the fifth open-hearth furnace in operation by yearend; and a stretch reducing mill is now being installed at the plant. The \$8-million expansion also includes a projected bar mill, which will use scrap from the pipe welding.

Despite recent rumors, Germany says Lone Star is not in the market for mergers at this time. **END**



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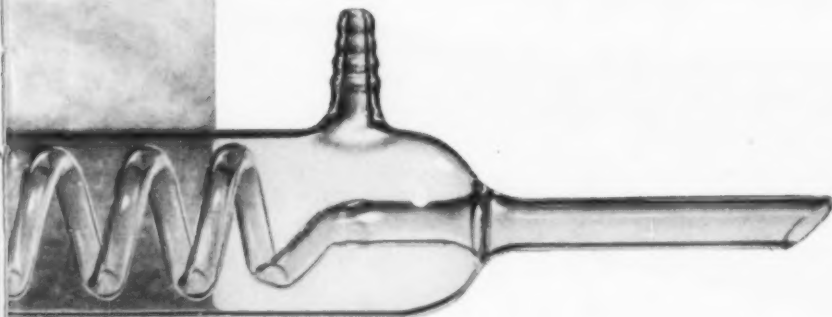
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DILEMMA DEHORNED



For centuries huge woven felts of pure wool have carried paper from the screens to the drying rolls on every paper machine in the world. Wool gives these felts the finish and drainage vital in making quality papers at low cost. But as paper-machine speeds increased, woolen felts began to wear out sooner. Some machines had to shut down every few days to change felts—and such shutdowns were very costly.

Then along came synthetic fibers with greater strength and resistance to abrasion, providing a partial answer. But unfortunately, felts containing too much synthetic fiber do not impart the finish essential to many types of paper. As you blend synthetics with wool to gain toughness on the one hand, you may sacrifice finish on the other.

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Huyck (pronounced Hike) characteristically approached the dilemma from a new direction. After years of research, F. C. Huyck & Sons perfected a chemical process that makes the natural wool fiber wear like a synthetic, while retaining wool's soft, cushiony, resilient characteristics. This revolutionary 4-D treatment of Huyck Papermakers' Felts is proving a tremendous boon to the paper industry.

Through this type of research F. C. Huyck & Sons is keeping pace with the technological advances in papermaking, a reason Huyck has grown as an integral part of the prospering and stable paper industry since 1870.

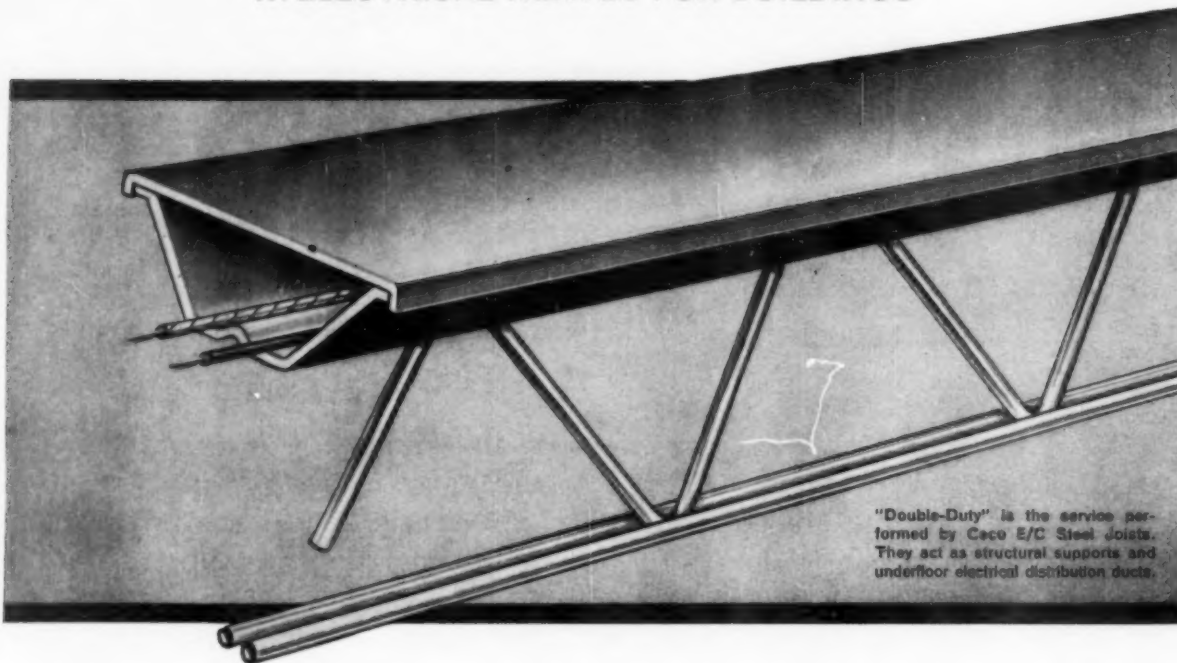
HUYCK PAPERMAKERS' FELT DIVISION OF

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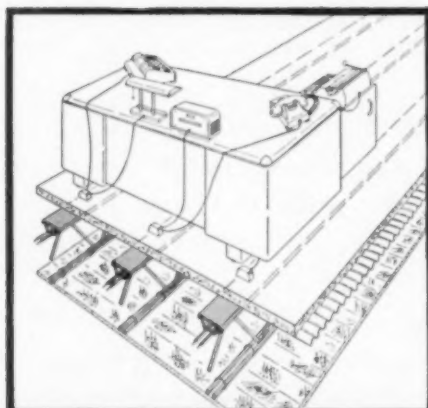
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"Double-Duty" is the service performed by CECO E/C Steel Joists. They act as structural supports and underfloor electrical distribution ducts.



Ceco E/C Steel Joists support the floor and serve "double-duty" as underfloor electrical channels. Wiring can be brought up through the floor any time during the life of the building.

PATENT APPLIED FOR



CECO'S New Exclusive Double-Duty Electro-Channel Steel Joists Save Building Time...Save Weight...Save Money, Too

"Nerves" can be an asset to business management—especially when they're *electrical* nerves that step up efficiency and pare costs. The tempo of modern business requires that structures be designed with electrical flexibility in mind... to allow easy locating of outlets for the increasing number of business machines.

And now flexibility is readily attained with Ceco's new exclusive Electro-Channel Steel Joist construction... a faster method... and at *lower cost than any other system*. Designed for "double-duty", Ceco's E/C Steel Joists function as both structural members and underfloor electrical distribution ducts.

They provide lightweight but strong floor framing... and they're immediately available. So ask your architect or write for details. *Ceco Steel Products Corporation. Offices, warehouses and fabricating plants in principal cities. General Offices: 5601 West 26th Street, Chicago 50, Illinois.*

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FINNISH HOSTS drank toasts amiably with Bulganin (second from left) and Khrushchev (right) but resisted the Soviet embrace.

Finns Want Closer Ties to West

Despite their neutrality and new blandishments offered by visiting Soviet bigwigs, the Finns will stick with the West. With the economy in crisis, it will take some doing.

THE FINNISH people were preparing at midweek to bid a farewell as cool as their welcome to two formidable visitors from their huge neighbor to the east—the Soviet Union. For a week now, Soviet Premier Nikolai Bulganin and Communist Party boss Nikita Khrushchev have been smiling benignly at the Finns. But the smiles have made no more impression than the hints that if only Finland would accept Soviet friendship and trade, its 4.3-million people could find a comfortable niche in the Soviet bloc.

The Finns resisted the Russians stoutly during the 1940 Winter War and its aftermath, and they seem equally determined to resist the Russian overtures today. This isn't just because of bitter memories. The Finns feel that they belong with the democratic West. And they intend to remain with it—and even to move closer, by joining the Free Trade Area in Western Europe if it comes to life. Still, the Finns will maneuver carefully to avoid a crisis with Moscow. And they have no thought of giving up the military neutrality they share with Sweden, their neighbor to the west.

• **Inflation Bogey**—For all their brave front, the Finnish leaders know that

economic pressures could drag their country gradually into the Soviet Orbit. Inflation—so severe it could almost be called runaway—hit Finland last year, and it must be brought under control soon. Otherwise, Finland's forest products—the bulk of its exports—will lose their competitive position in Western markets. There may be ways to get around the high prices now. But there won't be if Britain (Finland's chief market) joins Sweden and Norway (its chief competitors) in a Free Trade Area attached to the proposed six-nation Common Market.

If Finland isn't competitive when that happens, joining the Free Trade Area will be out of the question. The only alternative will be to find markets for its export products in the Communist bloc and buy its imports there, too. In a weekend speech to the Communist-dominated Finnish-Soviet Friendship Society, Khrushchev flatly said that coexistence between the two countries means economic as well as political ties.

• **Test Tube**—If competitive coexistence is now going to be the theme of relations between East and West, then Finland is bound to be a real testing ground for both sides—as im-

portant as any in Europe and, some Finns feel, certainly more important than Poland. For Finland has so far stayed on the Western side of the Iron Curtain.

I. Raging Inflation

Finland's inflation has almost everyone worried, except the Finnish Communists. From yearend 1955 to early 1957, the official price index climbed 20%, under the impact of last year's general strike on the Finnish system of tying wages to the cost-of-living index and farm prices to wages. This system, described as a "machine for inflation," got out of hand as a result of pressures on Finland's two largest parties, the Social Democrats and the Agrarians, which governed the country through a coalition from the 1954 elections until a week or so ago.

Largely as a result of inflation, Finland's financial plight is at least as grave as France's. The government has run out of money to finance its normal expenditures. Last year, despite a system of subsidies, exports began to dwindle, just as imports rose. This has depleted the dollar and gold reserves in the Bank of Finland and forced the government to cut this year's imports from Western Europe by 30%.

• **Made in Moscow**—One result of Finland's worsening trade position in the West is visible on the streets of Helsinki

Its eyes are on you! Electronic "eyes" watch every move* every Mo-Pac train makes along its 10,000-mile steel highway. Result: greater passenger safety, faster freight!



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Route of the EAGLES

*Centralized Traffic Control panel.



GOVERNMENT of Finland is headed now by V. J. Sukselainen, Agrarian leader.

and other Finnish cities. An unusually high proportion of the new autos and trucks come from the Soviet bloc—the USSR, Czechoslovakia, and East Germany. During the first four months of this year, 74% of Finland's auto imports came from the East, against 60% in 1956. Imports of trucks and buses from the East have risen from 17% to 67% of the total.

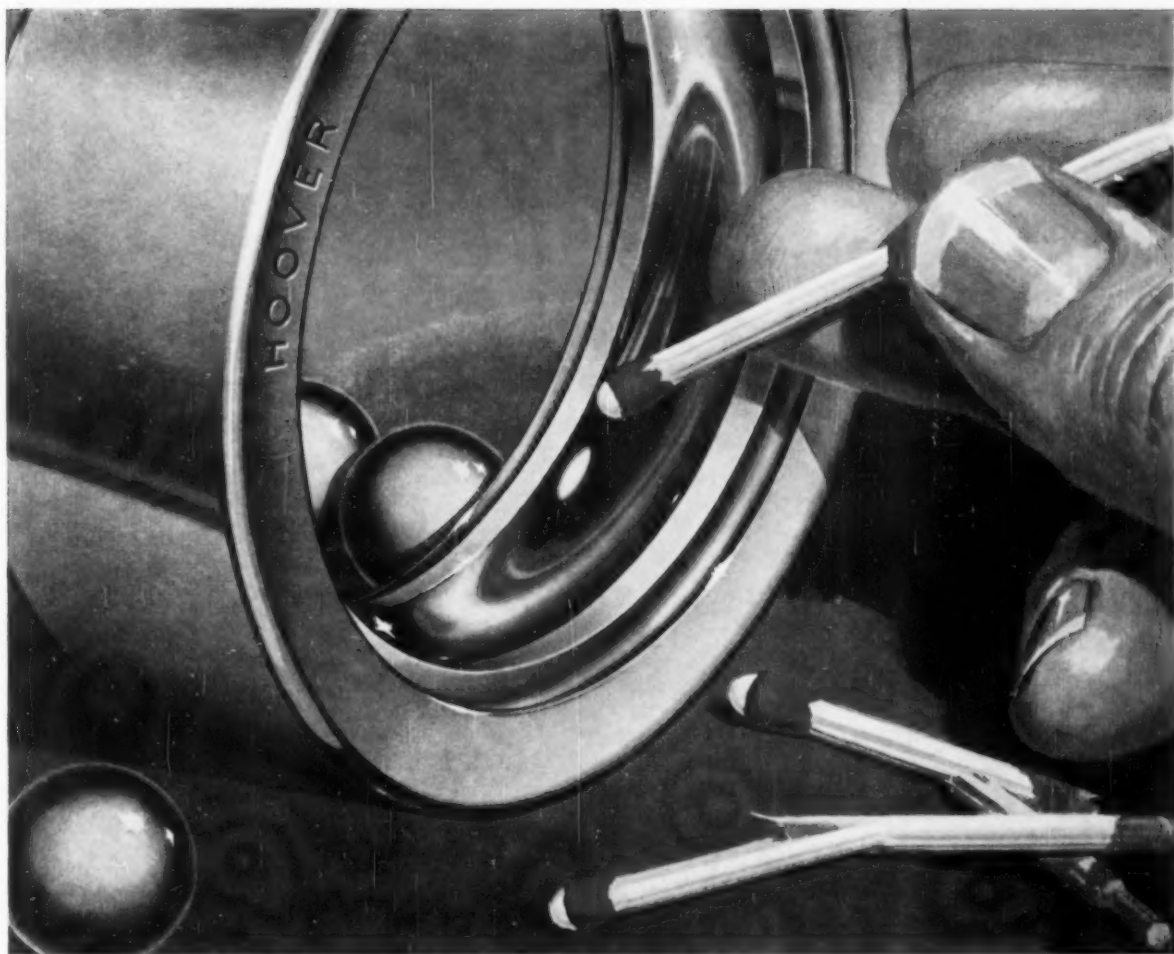
Even with these increases, the total of Finnish imports from the East isn't likely to climb much above the recent level—25% of total imports. (As for exports, about 25% of them go to the East.) But Khrushchev talked this week about supplying Finland with a wide range of consumer goods and buying more Finnish ships and machinery.

II. Political Uproar

Inflation was also responsible for the political crisis that preceded the Soviet leaders' visit to Finland. The coalition government headed by Social Democratic Premier Karl-August Fagerholm began to crack in April when the Socialists split over new trade union wage demands. At that point, Vaino Tanner—head of Finland's huge cooperative organization and a hero of the Winter War—emerged as Socialist Party chairman and leader of a bloc determined to halt inflation, even at the cost of resisting labor demands.

Fagerholm tried in vain to compromise the differences in his party, induce the unions to accept a 3% wage increase instead of the 8% they demanded, and keep the Agrarians in line. Industry, including many government or half-government enterprises, was prepared to face strikes rather than grant more than 3%.

Finally, after an adverse vote in the Diet, Fagerholm gave up as Premier in favor of V. J. Sukselainen, Agrarian



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Bearing life—load capacity—quietness. These and other factors in ball bearing performance depend largely on the smoothness and finish of the bearing's raceway.

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Investigate Hoover's line of ball bearings in the light, medium and heavy series, available in a variety of types. Hoover engineers are ready to assist manufacturers with engineering and design information. Write Hoover about your problem.

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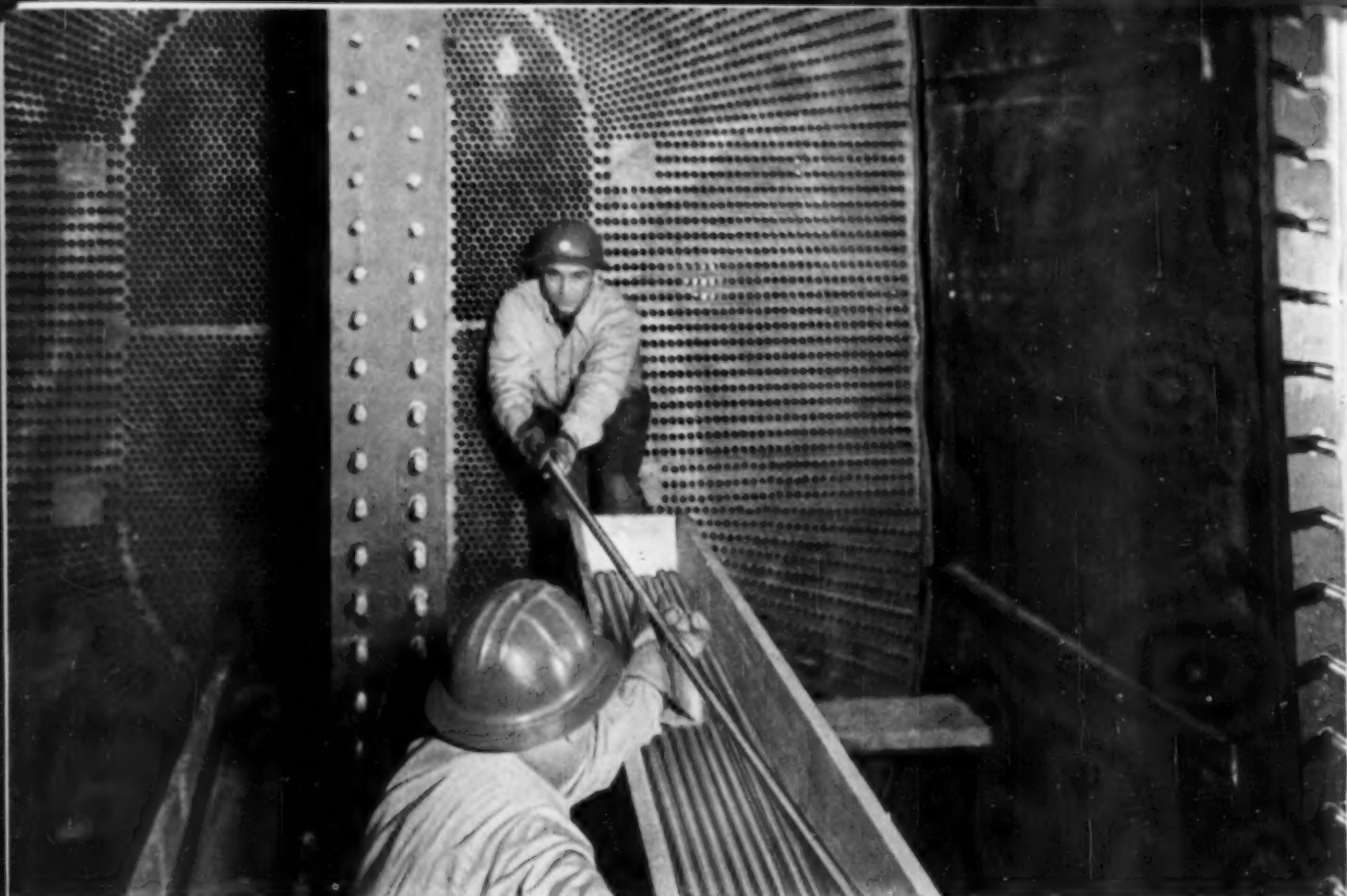
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BW-11



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First big atomic power plant uses 60 miles of Anaconda Tube

HOW TO "BURN" URANIUM. America's first big atomic power plant shown in a cutaway scale model. In this Pressurized-Water Reactor, uranium elements heat water to more than 500 degrees F at a pressure of 2000 lb. per sq. in. Water heated by the reactor makes steam in heat exchangers to run the turbine-generator. Over-all plant design by Westinghouse. Duquesne Light Company, Pittsburgh, is building the electric generating plant, shares in the cost of the reactor plant with the Atomic Energy Commission and will operate the entire plant.



Hand points to the heart of the atomic power plant shown in a cutaway scale model. In this Pressurized-Water Reactor, uranium elements heat water to more than 500 degrees F at a pressure of 2000 lb. per sq. in. Water heated by the reactor makes steam in heat exchangers to run the turbine-generator. Over-all plant design by Westinghouse. Duquesne Light Company, Pittsburgh, is building the electric generating plant, shares in the cost of the reactor plant with the Atomic Energy Commission and will operate the entire plant.

the nuclear power source and help guide the design of new and bigger plants.

The turbine-generator in this plant requires nearly one million pounds of steam every hour to produce a maximum of 100,000 kilowatts of electric power. To re-use this tremendous amount of water and to get the greatest possible efficiency from the system, the huge steam condenser shown above is used.

In it, 60 miles of Anaconda Arsenical Admiralty Tubes provide 70,000 square feet of condensing surface. Cooling water from the nearby Ohio River is pumped through the tubes. The turbine's exhaust steam condenses on the surface of the tubes, and the resulting water is pumped to the nuclear boilers for re-use.

THE PROBLEM OF CORROSION. Arsenical Admiralty Alloy is one of the important developments of Anaconda's

American Brass Company laboratories, where corrosion problems are constantly being studied.

The contributions of Anaconda specialists are helping to make condensers and heat exchangers give longer and more dependable service in electric power plants, ships, oil refineries, chemical plants, and almost every branch of industry.

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PRESIDENT of Finland, Urho Kekkonen, might call elections if nothing else works.

leader and former Speaker of the Diet. Sukselainen now heads a minority government representing three parties (Agrarians, Liberals, and the Swedish Party) with only 79 seats out of 200. But apparently the new Premier expects enough votes from Conservatives and Socialists to put through a stabilization program, which he plans to present to the Diet as soon as the Soviet visitors depart.

• **Last Resorts**—If Sukselainen has no success with his program, it looks as if Finnish Pres. Urho Kekkonen will have only two choices:

• To call new elections under a special constitutional provision. It's unlikely, though, that the Socialists will let this happen. Because of the open split in party ranks, they are afraid of losing votes—and, above all, of losing ground to the Communists, already the third largest party.

• To select as Premier someone who will form a government of experts—possibly the able and popular governor of the Bank of Finland. A solution such as this ended a political jam before the 1954 elections. It would have the advantage to both Socialist and Agrarian politicians of giving the tough stabilization job to someone else—and letting them off the hook.

III. Effects of War

Finland only now is facing the consequences of economic policies followed since the 1947 peace treaty with Russia. They were intended to cover the losses of war and at the same time maintain a democratic society with a rising standard of living. The process involved heroic effort—as well as some economic measures that must be regarded as dubious by any standard.

• **Russian Revenge**—At the bottom of

"...and every fourth box is free!"



This H&D corrugated box costs only three-quarters as much as the wooden case it replaced; provides easier handling, improved identification for heavy hardware. Is cost a problem? Better see H&D.



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"... so I said to him, 'Refill your radiator and cool off, boss. A girl's not a Westinghouse Water Cooler... she needs a little care and repair once in a while!'"

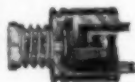
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SPLIT in Socialist ranks came after Vaino Tanner demanded an end to inflation spiral.

Finland's troubles lies the terrible price Russia exacted for the Finns' fierce resistance during World War II—both in reparations and in territorial losses.

The official reparations figure is much lower, but \$700-million would be a fair estimate of their cost. That's a tidy sum for a country whose annual gross national product has exceeded \$3-billion only in the last two or three years. Reparations deliveries have been largely responsible for the diversion of so much Finnish trade to the East.

Soviet annexations of territory amounted to 12% of Finland's total area. This included Finnish Karelia, with about one-third of the country's power resources, and Petsamo, with its rich nickel mines. Because of the loss of Karelia, the Finns have been forced into large-scale hydroelectric programs to tap all remaining available power resources. One of the largest is on the Kemi River in southern Lapland. In Lapland, too, the Finns now are hopefully seeking new minerals to offset the loss of Petsamo's nickel.

In addition, Finland had to pay for transferring 425,000 people from Karelia to new farmland homes elsewhere in the nation. Many of these, established on marginal lands, have since exerted pressure through the Agrarian Party for higher farm prices.

• **Entering Wedge**—During the partial Soviet occupation of Finland in 1945-47, the Communists entrenched themselves firmly in Finnish politics. In 1954, the Communist vote dropped from about 25% to about 22%. Even so, about half the organized workers in Finland still are Communists. This gives them a lot of leverage in wage maneuvers—as well as in strikes. About one-third of the members of Elanto—the 104,000-member cooperative organization headed by Vaino Tanner—are



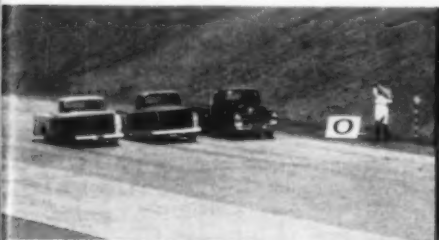
Dodge truck, the winner by five lengths, and still gaining. Dodge outdistanced both truck "X" and truck "Y" right from the start of this test up a steep 32% grade.

Actual Road Tests Prove Dodge Boss of the Low-Priced 3!



1. They're off! All three low-priced trucks were lined up at the bottom of a test-climb equal to the steepest hill in San Francisco. At flag drop, trucks start climbing; Dodge takes the lead.

2. Halfway up, Dodge is three lengths ahead of truck "X", two lengths ahead of truck "Y". Since all trucks are comparably equipped and equally loaded, it's a true test of power in action.



Now see the proof yourself! Recently all three low-priced trucks were put through a grueling series of competitive tests and rapid-sequence photographs were taken of every event. The photos speak for themselves. In test after test of power, acceleration, performance and payload capacity . . . Dodge Power Giants swept the field.

Mighty Dodge V-8's deliver the extra power you need to take steep climbs . . . or zip safely past slower traffic. Want proof? Look at the test photos shown here. And these action shots tell only part of the story.

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Then test a Power Giant yourself. You'll agree that you're driving the boss of the low-priced three when you drive a Dodge.

DODGE ***PowerGiants***

Most Power of the Low-Priced 3

1. This acceleration test, on level ground, matches Dodge against its two low-priced competitors to prove Dodge offers extra power for safer passing on the highway and in city traffic.

2. At the quarter mile, Dodge is five lengths ahead of truck "X", almost seven lengths out in front of truck "Y". It's camera-eye proof—passenger-car performance in a truck.

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The value of home furniture to one who owns and uses it is one thing—its value in the used furniture market may be but a fraction of the former. One represents value to the owner. The other represents liquidation value.

The same principle applies to industrial property. If the property has been successfully operated by one who expects to continue producing a fair profit on its worth, it has a value which is measured by cost to reproduce less proper allowances for depreciation.

But suppose management decides to move to a new location and abandon the present plant. The value of the property, detached from the business and placed on the market, may represent a far lower figure. The fair market value is influenced by economic factors which affect the demand for such idle property. Equipment such as foundations for machines, piping and power feed wiring may have little or no salvage value.

When property is appraised for insurance purposes, the basis is the cost of reproduction less depreciation. But if the appraisal is to establish the fair market value as between a willing buyer and seller, it is necessary to investigate the economic factors affecting its desirability. These

include such factors as locational advantages or disadvantages, public improvements, property taxes, transportation facilities, labor supply, and whether the operating results (past or prospective) indicate a fair return on the investment. Equally important are prices of comparable properties in the area. The results might be quite different from the insurable value of the property.

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Communists. And among the Communists are some shrewd politicians, including Hertta Kuusinen, Moscow-educated daughter of a long-time Stalin henchman. She is chairman of the Communist parliamentary bloc.

IV. Popular Pressures

On top of its special postwar problems, Finland has seen a struggle by farmers and workers for a larger chunk of the national income. In trying to settle this with an economic truce in 1951, the country produced its "machine for inflation."

It was decided to distribute the national income on an agreed pattern. Wages were tied to the cost of living, farmers' income to wages. Then the government tried everything to keep the index from rising far enough to necessitate wage increases that would start an automatic spiral of inflation. To hold prices down, the government sometimes resorted to subsidies, sometimes to reducing indirect taxes. This was a heavy burden on the budget, and it distorted market-price mechanisms.

• **Up and Up They Go**—At the beginning of 1956, farmers tried to better their lot by raising the price of milk. So the trade unions demanded wage increases. When they were rejected, there was a general strike, and that, in turn, stopped all farm deliveries. The settlement resulted in a wage increase of 7%, and this forced an adjustment of farm income. But then, with wages and farm prices both higher, the cost-of-living index climbed enough so that another wage adjustment could be requested. This request, still in negotiation, is the cause of the political crisis.

Meanwhile, the government discontinued or reduced some of the subsidies on consumer goods, in order to improve its budget position. However, this also raised the cost-of-living index. It helps account for the 20% increase.

• **Fiscal Ills**—Chances are that the new Finnish government—or a successor—will devalue the Finnmark if it can first stabilize prices and get the budget under control. Government economists and Finnish businessmen alike think their currency must be set right (the Finnmark is estimated to be overvalued 30%) if the country is to be in shape for the Free Trade Area.

Before Finland can accomplish devaluation successfully, however, it may need more financial help from the West. So far, Western aid hasn't amounted to very much—even counting the \$65-million loan by the World Bank for Finland's power development. Only in the past three years has the U.S. been giving assistance to the Finns. Since mid-1954, Finland has received about \$34-million from the U.S. through surplus commodity agreements. **END**

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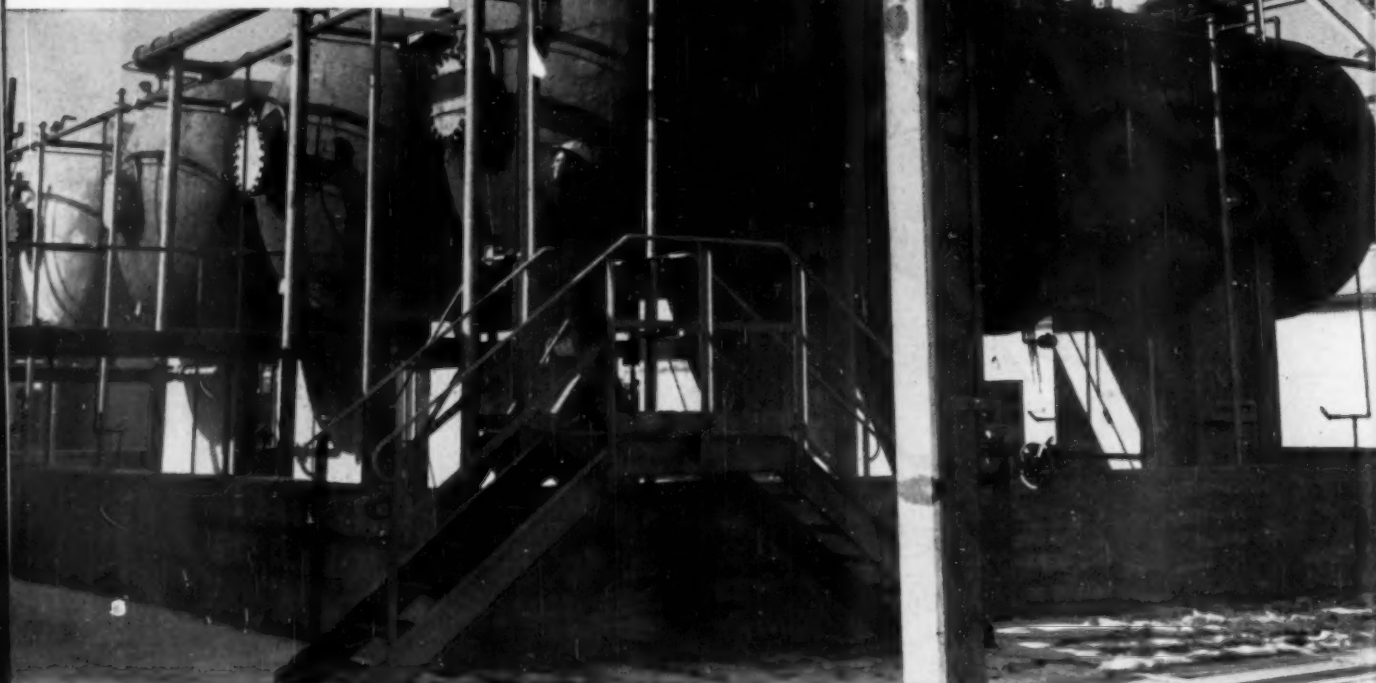
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These 4 General Tire tanks, each 9' in diameter and 27' long, operate year 'round at 50°F. and 35 psi to hold vinyl chloride monomer in a liquid state. Accurate, economical temperature-pressure control is easy because the tanks' jackets of 2" FOAMGLAS insure constant, high insulating efficiency. 1000 lin. ft. of supply and refrigeration lines are also protected by 2" FOAMGLAS.

General Tire finds FOAMGLAS stays efficient in tough, outdoor low temperature insulating job

Outdoor low temperature piping and equipment is one of industry's toughest insulating problems. That's why General Tire and Rubber Company picked tough, durable FOAMGLAS to insulate 4 outdoor vinyl chloride tanks, supply and refrigeration lines at their Ashtabula, Ohio plant.

General's past experience with FOAMGLAS at other plants had proved that its inorganic, all-glass composition and sealed cellular structure make it immune to moisture, acid atmospheres, spillage, condensation damage and the other hazards of insulating outdoor equipment. Its insulating value can't vary . . . ever! It's dimensionally stable and completely incombustible, too.

P. J. Wallace, Manager of the Ashtabula plant says: "Even when insulating conditions are toughest, we

count on FOAMGLAS for constant efficiency to permit easy, economical control of pipe and equipment operating temperatures. It eliminates frequent, costly insulation replacement and the expensive production shut-downs that result."

What's *your* insulating problem? Tough or easy, you'll solve it best with FOAMGLAS. Prove its unique benefits to yourself! Send today for a free sample and directions for six easy tests to try in your own office. Ask for FOAMGLAS Industrial Insulation Booklet, too. Address . . .

Application of FOAMGLAS tank jackets was done quickly and at low cost because of the insulation's light weight, strength, rigidity and ease of cutting. FOAMGLAS was banded in place (stainless steel on 9" centers), joints were sealed and a covering spray-coat of fibrated asphalt cutback applied.

Pittsburgh Corning Corporation

Dept. F-67, One Gateway Center
Pittsburgh 22, Pennsylvania
In Canada: 57 Bloor St. W., Toronto, Ontario



Also manufacturers of PC Glass Blocks



Battle of the Bottlers Overseas

Competition is just as rough as at home, with slogans, giveaways, and contests to boost soft-drink sales.

THE SOFT-DRINK industry is fighting the biggest battle in its history to win overseas markets. It is pushing fast and hard into faraway areas to get foreigners to drink colas, fruit drinks, and just about anything else that's carbonated, colored, and "refreshing."

In the coming months, Coca-Cola Export Corp. will open new bottling plants in Hilla, Iraq; Diego-Suarez, Madagascar; and Wagga Wagga, Australia. In a matter of weeks, Pepsi-Cola International will begin bottling operations in Kuala Lumpur, Malaya, and in Hong Kong. Just last week, Canada Dry International, Inc., began setting up its first bottling plant in Argentina. Mission of California, Inc., is blue-printing plans for bottling soft drinks in Angola on the west coast of Africa.

• **Growing Fast**—This overseas campaign isn't new—most of the industry leaders were operating abroad before World War II. But the competition today is the fiercest ever.

In 1948, Coca-Cola, king of the industry, had 160 franchised bottlers outside the U.S. and Canada. Today, its overseas empire numbers 455 bottlers—with roughly 20 new franchises signed each year. And 455 is a big figure when you consider that Coke has 1,100 bottlers in the U.S.

Pepsi has 155 bottlers outside the U.S. and Canada—85 of these opened since 1950. Orange-Crush Co. claims it has between 125 and 150 abroad—25% of them opened since the war. Canada Dry, which had 26 overseas bottlers in 1946, now boasts 76. And some 15 smaller companies are moving into the battle overseas.

• **Industry Rank**—The industry—highly competitive as it is—clams up on sales figures. But in dollar volume overseas, industry people rank Coke, Pepsi, and Canada Dry as the leaders—in that order. You get a very rough idea of how much money these sales add up to when you figure that Coke, with consolidated net sales of \$273-million last year, has 27% of its bottling plants overseas—seven of these plants among the largest in Coke production.

Even this doesn't tell anywhere near the full story. Compared with Coke, Pepsi has moved up fast since its management changeover eight years ago. Its net sales—\$40-million then—now runs to \$97-million yearly.

Despite the fact Coke has three times



IN BELGIAN CONGO, the customers proudly wear Pepsi's advertising caps.



IN HOLY MECCA, Saudi Arabia, pilgrims enjoy "the pause that refreshes."



Printing and addressing labels in the same operation



Addressing cartons with a stencil that can be typed or handwritten

Shipments go out faster, without errors with modern Weber Marking Systems

Old-fashioned stenciling and labeling systems can seriously delay shipments and waste time and labor. The real key to a smooth rolling shipping operation is a fast, low-cost system for addressing the shipments.

A Weber system—tailored to your particu-

lar order-processing and material handling procedure—will get your shipments addressed faster, with less help and fewer errors. Whether you use labels, tags or stencil direct-to-carton, you'll find a system just right for your operation.

Write for your free copy of our New 16-page systems booklet

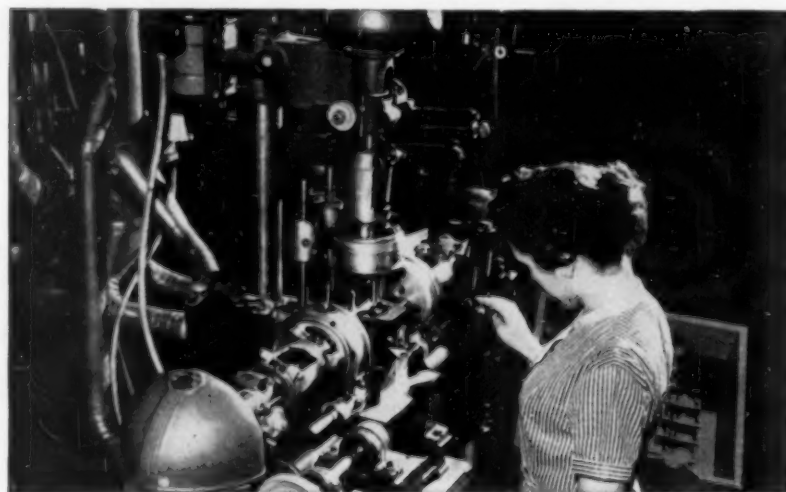


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Dept. 15-F
Division of
WEBER ADDRESSING MACHINE CO., INC.
Mount Prospect, Ill.

SALES AND SERVICE IN ALL PRINCIPAL CITIES



CREATORS OF SYSTEMS AND EQUIPMENT FOR MULTIPLE ADDRESSING AND MARKING



STANDARD TOOLING in special purpose set-up

This multiple unit set-up of nine standard 14" Delta Super-Hi Speed Drill Presses solved a complex production problem and saved an investment in special machine tools for Whitehouse Products, Inc., Brooklyn, N. Y. Completely automatic, the four drill press arrangement shown above drills 16 holes and does deburring on 300 camera parts an hour. Whitehouse

Products, Inc. is a typical example of how thousands of companies are using accurate, low cost Delta Power Tools to supplement or replace costly conventional tooling. For fully illustrated booklet of examples in other industries write:

ROCKWELL MANUFACTURING COMPANY
DELTA POWER TOOL DIVISION
540F N. Lexington Ave., Pittsburgh 8, Pa.



IN BOLIVIA Canada Dry products hold the stage with native fruit drinks.

Pepsi's number of bottling plants overseas, Pepsi reportedly is (1) leading in most markets where it competes directly with Coke bottlers, and (2) setting up a larger proportion of its overseas bottlers as big-volume operators that generally cover a broader territory than Coke's.

I. Special Problems

The industry abroad operates pretty much the way it does at home—even to the point of using the same ad slogans where possible. After making surveys, you pick what looks like a good market. Then you sign up a reliable bottler, who carries the burden of financing a bottling plant that costs anywhere from \$50,000 to more than \$1-million. You help him out on production details and advertising—and sell him all the concentrate you can.

The Big Three—plus Seven-Up, Orange-Crush, and Nehi (Royal Crown)—try to set up shop all over the map. Smaller companies usually push one area—for instance, General Foods' Bireley's Div. in the Far East.

• **Many Foreign Entanglements**—Beyond bread-and-butter operations, there are myriad special problems that must be dealt with in foreign countries, among them:

Transportation. This is a basic industry cost. "You want to cut down your loading and traveling time in this business," says a Pepsi executive. In such countries as Brazil, bad roads are a major headache to bottlers. Often this can lead to setting up more bottlers abroad for a given territory than you would at home—just to get closer to markets.

The only trouble in doing this is that you narrow the bottler's market—and sheer sales volume after the break-

TORQMATIC brings nonstop push to tractors



You wouldn't believe it to look at one, but a tractor needs the smooth, precision nimbleness of a ballerina.

On that score, TORQMATIC *delivers*. In pushing, pulling, turning and reversing, TORQMATIC provides a constant, smooth, almost rhythmic flow of power.

With just a flick of the finger, your operator can full-power shift to the right gear without losing the "push" for even an instant.

Three speeds forward, three speeds reverse make a TORQMATIC tractor the most versatile tool of any contractor.

For bulldozing, loading, digging and you name it, take a tip from 55 manufacturers of 122 different kinds of road-building and construction equipment. Get the Allison TORQMATIC story.

Ask your equipment dealer, or write:

Allison Division of General Motors, Box 894B,
Indianapolis 6, Indiana

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ON SPEEDING AMERICA'S
ROAD-BUILDING PROGRAM



Allison

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Your employees can be certain of their pension payments with pensions provided under a plan with The Travelers. And with a Travelers plan you can anticipate your costs.

An experienced Travelers Group Pension representative can help you design a plan to meet your company's requirements. Regular Deposit Administration, Deferred Annuities, Direct Rating Deposit Administration, Insured Profit Shar-

ing, Split Funding, Terminal Funding—he'll build a plan that will accomplish your objectives.

If you've been thinking of providing a pension plan for your employees—or wondering whether your present plan is adequate—you'll find a Travelers Group Pension representative a valuable counselor.

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even point is what makes money in this industry.

Dollar restrictions. Many countries—for instance, Japan—have slapped all sorts of restrictions on imports of soft-drink concentrates and bottling machinery, because of their dollar shortage. Before the war, the industry would ship pure concentrate—and sometimes even ready-to-sell bottles. Now it must think about setting up concentrate plants abroad that use local raw materials. For example, Coke's British plant supplies bottlers in many sterling countries.

Currency changes. Devaluations of local currency often start price wars. When Mexico devalued a few years back, all the soft-drink companies—and there's hardly one that doesn't operate in Mexico—rolled up their sleeves for a price war. Several of the industry leaders tried to hold the line, despite rising costs for U.S. concentrate and equipment. Others, who had raised prices, ran "giveaway campaigns" with prizes and premiums.

Management. So many foreign businessmen—often well-to-do sons of uppercrust families—approach the soft-drink companies for franchises that the companies have to turn them away. The problem is finding foreigners who are resourceful enough to finance a plant and who are also highly reliable. With bottlers spread so far, the U.S. headquarters must rely on the local man to run the whole show in his territory—without much contact with the parent.

Promotion campaigns. Coke ran into a snag in France by translating "Drink Coca-Cola" into "Buvez Coca-Cola"—instead of the more correct "Buvez du Coca-Cola." In the Middle East, Seven-Up's ad—"Cool pet of the teen set . . ." became "Youth's favorite refreshment . . ." in local translation. And it didn't go over very big. But the translation of Seven-Up's "You like it; it likes you" into the Arabic "Tihebbaha; Tihebbak" was a grand success.

II. Same Old Competition

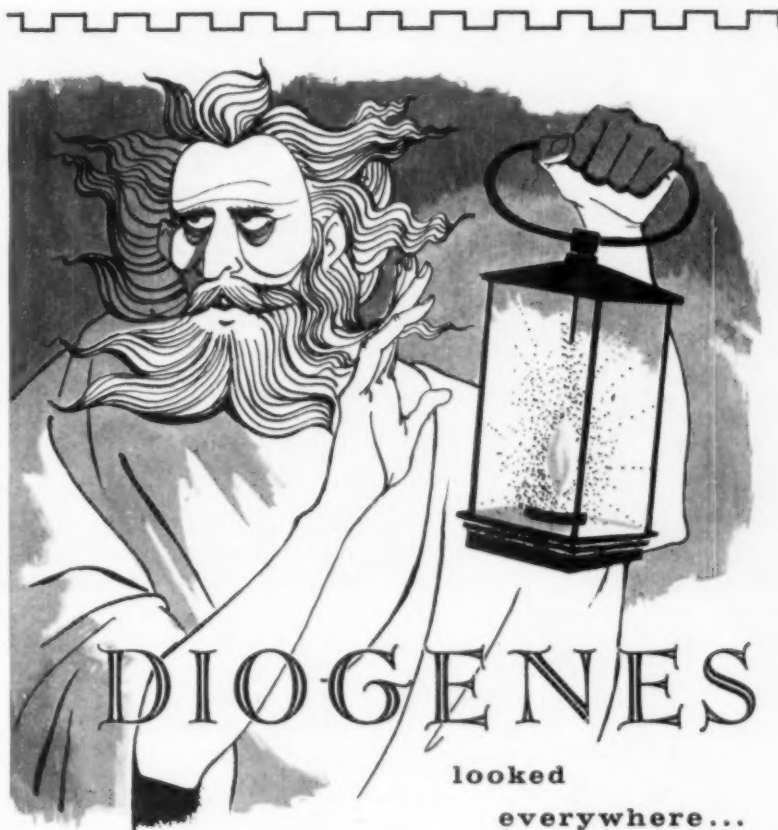
Competition overseas is as rough as any here.

In Aguascalientes, Mexico, Canada Dry runs hundreds of spot radio ads on the local station. In Mexico City's bull-fighting stadium, Pepsi puts a 14-ft. high bottle in the center before the show begins—and has virtually an exclusive franchise on stadium advertising.

In Chile, Coke has sponsored a sales-winning campaign against juvenile delinquency.

In Guayaquil, Ecuador, competition roars, with price battles, land plots handed out free, and prize junkets to New York for contest winners.

Smaller companies don't seem to



Lamp in hand, Diogenes tramped barefooted through the streets of Athens looking, he said, for a truly honest man. There must have been many relatively good men and true in old Athens. The trouble was probably with Diogenes. Like many of us, he aimed for perfection and just set his standards too high.

Today, many manufacturers find themselves in a like fix.

In their zeal to make an honest product, they frequently reject parts and materials that would be perfectly good for their purposes. Why? Because they reject for *seeming* defects. Or, they toss out bad parts far too late,—after much production time and labor have been spent on them.

In either case, these men rob themselves of legitimate profit through unnecessary high cost.

Magnaflux nondestructive test systems are in wide use, as a means of controlling production costs and quality. They make defects visible or show incorrect material characteristics or composition—at any stage of the production processes. Such early detection permits rapid correction of small troubles before they become big and expensive.

If you would shed light on how Magnaflux Test Methods could help improve your production operations, write for your copy of "LOWER MANUFACTURING COSTS". This new booklet clearly illustrates where and how these production tools have helped others. They can do the same for you.

Test equipment by Magnaflux can be tailored to your exact needs. Prices vary from a few hundred to a few thousand dollars—outright sale, no rentals required.

Moral: A little light can uncover a problem...a little thought can suggest a cure.

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OF QUALITY

IN TEST SYSTEMS

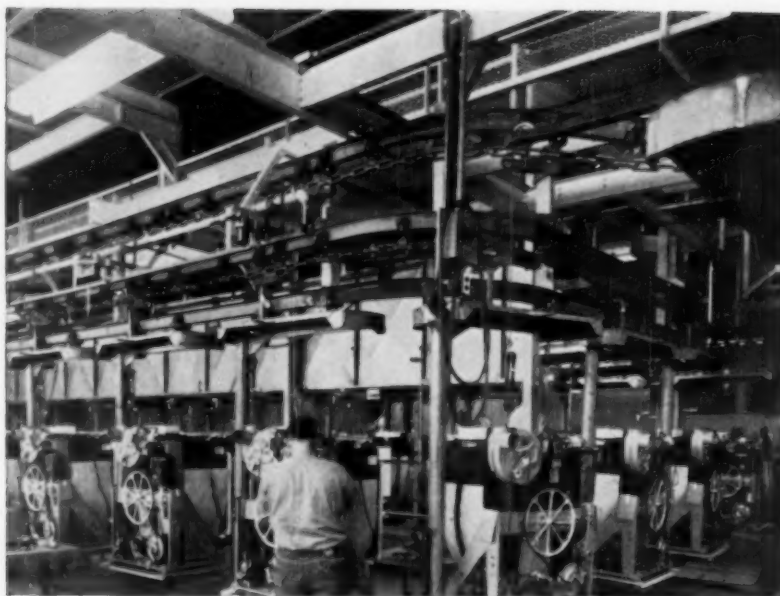


MAGNAFLUX CORPORATION

7306 W. Lawrence Avenue • Chicago 31, Illinois

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To Test Is to Economize



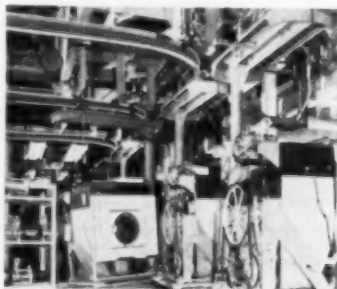
How to grow a washer-dryer in *88 minutes*

In one of the country's greatest appliance plants it's done in 576 feet on an MHS power-and-free conveyor system. From automatic pickup of sub-assembly to automatic delivery of finished unit at the crating line is a smooth, continuous, automatically controlled ride that carries the washer-dryer through assembly, test loops, into and out of adjustment lines if necessary, and through final inspection.

MHS power-and-free conveyor systems bring maximum flexibility to production lines. They're like a modern railroad, with main line, spur tracks for repair, storage or classification, automatic switching, automa-

tic dispatching, automatic controls.

You, too, may gain the competitive advantages of improved product quality, higher production and reduced costs through a revolutionary, new MHS power-and-free conveyor with simplified controls. Call in an MHS engineer now.



Units requiring adjustment after testing are switched automatically into free line, left above, for attention.



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"... the industry—Coke included—is in the midst of an intramural battle for markets . . ."

STORY starts on p. 131

feel the competitive sting so much. Delaware Punch Co. of America, which has 26 bottlers mostly in Latin America, says that the "cola companies help us a lot" in opening up new markets. (That's partly because Delaware's drinks are fruit, not cola.) Pepsi, too, readily admits Coke has pioneered many areas.

• **Foreign Rivals**—Coke will tell you that its biggest competition is from foreign soft-drink companies. But when you look around the world, there's no denying that the industry—Coke included—is in the midst of an intramural battle for markets. Here's the picture:

In Western Europe, the hottest battle is raging in West Germany. Coke has more than 100 bottlers, claims its sales have doubled since 1953 and now account for half the German soft-drink market. Pepsi, which moved in with the U.S. Army during occupation, now has seven plants. Third-ranking Canada Dry—in Germany since 1953—claims roughly 10% of the market. Unlike the two leaders, it ships in concentrate from the U.S. Seven-Up is moving in fast, too.

In Britain, the big drive began in 1955, after the end of sugar rationing. Now one market survey puts Pepsi in the lead in London by seven to four, while one industry expert places Coke first. Pepsi, for one, has vending machines, is gradually going into cup machines. Proof that Britain—despite its love for warm beer—is going for ice-cold soft drinks is the doubling of soft-drink sales over the past 10 years.

In France, Coke faced attacks from the Communists, brewers, and winegrowers after the war. It won a suit against the winegrowers, who called Coke dangerously unhealthful. Now Coke sees some profits on the horizon. Because of France's taste for orange and lemon drinks—which Perrier and Vittel make—Coke is introducing similar drinks.

In Latin America, Venezuela is a huge market where some 100 bottlers do business. Soft-drink production is 10 times what it was in 1946. Pepsi, reportedly the leader, spends around \$700,000 annually for ads. It sponsors a popular TV program that picks a bride and bridegroom, furnishes wedding clothes, free honeymoon trip, and house furniture.

In Brazil, very sweet local drinks, made from guarana, are providing rough

PEOPLE BUY SCOTT TOWELS FOR MANY REASONS:



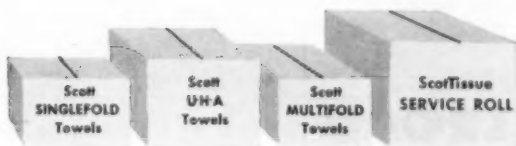
Mr. Russell Stark, Director of Purchases, Burroughs Corporation; President, Purchasing Agents Association of Detroit.

Burroughs appreciates Scott quality, value and service

"We made a value analysis of Scott towels," says Russ Stark, Director of Purchases for Burroughs Corporation, "on the basis of quality,

performance, value and service. Scott Paper fulfills all requirements. Employee preference confirmed—2 to 1—our decision to buy Scott."

Your Scott Distributor can help you with your washroom problems.



Chester, Pa.

Makers of the famous Scott paper products you use in your home. See Scott's TV program on NBC—"Father Knows Best."

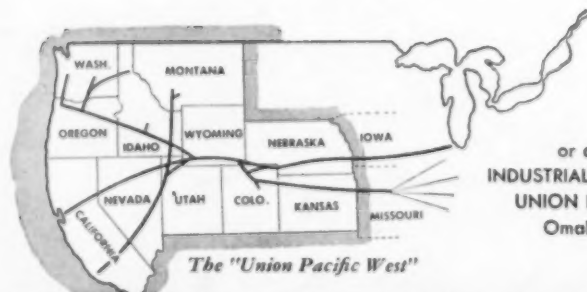
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from YOU to him**

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**INDUSTRIAL DEVELOPMENT DEPT.
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competition for the newer U.S. beverages. Though coke is the leader, it had trouble not long ago when a top politician said Coke caused cancer. (A government investigation proved him clearly wrong.)

Argentina was a welter of restrictions during Peron's time. Five years ago, Argentinians looked on Coke as a sissy drink. Now soft drinks are overtaking wine in total consumption—even though wine is cheaper. Coke has 50% to 60% of the market. (Competitors claim its Argentine organization nevertheless is losing money.) Orange-Crush—fairly strong in Brazil—is in second place in Argentina. Seven-Up, which made a bad start in 1952, is trying again.

In the Middle East, every kingdom, sheikdom, and republic—except Syria, Jordan, Yemen, and Turkey—has bottling plants. Since 1945, when it built its first plant in Cairo, Coke has been trail-blazing in neighboring countries. Now it has 20 plants. Pepsi followed with a Cairo company in 1949 in which ex-King Farouk and relatives held shares. When Coke countered Pepsi's success by introducing king-size bottles, Pepsi ran ads and posters declaring: "It's fun to be followed. It's nice to be recognized as the leader. . ."

Nationalism has stalled some plans for expansion. Anti-American Syria has permitted the German Sinalco and the Italian Portello to bottle soft drinks. But—even though bottlers would be 100% Syrian—the government won't allow any U.S. companies. As one Syrian puts it: "They're afraid there's a miniature Sixth Fleet in every bottle."

Yet business throughout the Middle East is thriving. Bottlers are making between 16% to 25% profit on sales.

In the Far East, Coke is cornering almost the whole Australian market. Even Schweppes—with "imperial preference"—is way behind Coke.

In Bangkok, capital of Thailand, U.S. soft drinks have supplanted the favorite prewar drink: a green coconut hacked open with a machete. Thais marvel at Coke's sleek, glass-window bottling plant. But local politics are a problem.

The prime minister's son, now deputy foreign minister, is a director and stockholder in the local Coke plant. When the prime minister served Coke at a press conference not long ago, newspapermen let out squawks at the political overtones. So now the prime minister serves iced coffee.

In Japan, the gradual lifting of restrictions on imports of soft-drink materials is opening a huge new market. Practically all companies have been selling in Japan since the war—but only to U.S. civilians and troops. **END**



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adds top-flight protection to its
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Across the southern states of the nation Southern Airways flies mail, passengers and air express. Its employees on the ground and in the air are protected by a program of Group Life Insurance with New York Life.

The program also includes Group Hospital and Surgical Insurance for employees and dependents and a Group Annuity plan to provide employee retirement benefits.

Southern Airways, Inc., is one of many firms in the United States and Canada which find that providing this protection program results in better employee relations. Under today's conditions, such a plan minimizes to a great extent the financial problems created when an employee dies or when he or a member of his family requires hospital care.

A New York Life plan is low in cost, easy to install and can be designed to meet the specific needs of any organization. Ask your agent or broker, or write direct for more information about New York Life group coverages.

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In Business Abroad

• • •

Appliance Makers of 14 Countries

Gather at Westinghouse Conclave

Westinghouse brought in the executives of the leading appliance manufacturers in 14 countries in the Americas, Europe, Asia, and Australia this week to a Columbus (Ohio) meeting. It was for a first-time conference with the 38 officials from Westinghouse licensee companies overseas.

Westinghouse wanted to present the foreign executives with information on financial planning, cost reduction, quality control, servicing, product promotion, and other phases of management. The group gathered in Columbus represented an annual appliance market of more than \$100-million.

The conference wasn't a giveaway for Westinghouse. The U.S. company has a problem of designing appliances for the domestic market since the tools used on this year's model may be sent abroad next year to produce a similar appliance there. That cuts down the cost of re-tooling here. And if an eye is given to the possibilities of foreign use when the American design is fixed, it makes the whole operation more efficient.

The complication arises when there are major differences between the U.S. and overseas product. Refrigerators, for example, designed to accommodate American milk cartons won't do for wine bottles. Similar problems arise with other appliances. One of the aims of the present conference is to devise methods of meeting these conflicts most efficiently.

• • •

Oil Company Reported Ready to Take Pemex Into the Family Fold of Business

Pemex, the Mexican government's oil trust (BW-Oct. 20'57,p30), may be about to reach the pinnacle of its growing business respectability: the announcement of a major joint venture with an American oil firm. Pemex's long, hard drive toward financial security and expansion since Mexico nationalized the private oil companies in the late 1930s has made notable progress under Director Antonio Bermudez. Pemex's credit with U.S. banks is large and freely given—even though a request for a \$150-million U.S. government loan was turned down in 1949. (Pemex is now dickering with French banks for a reported \$50-million to \$100-million loan.)

Still, U.S. and other international oil companies have for the most part shied away from dealings with the Mexican trust. This week there were unconfirmed reports from well-informed sources that Pemex is about to conclude a deal with Phillips Petroleum Co. to build jointly a polyethylene plant in Mexico City. Presumably Phillips would supply knowhow and patents. The \$64 question is whether Phillips, which appears to have beaten out Union Carbide, Monsanto, and Celanese for the job, will take a chunk of the investment.

Neither Pemex nor Phillips will confirm that the deal has been negotiated. But if Phillips has gone along, it's clear why. Mexico now has a market for between 2,300 and 2,700 metric tons of polyethylene annually, all imported. By 1960 it's estimated that the market will have doubled—even if imports are the only source of supply. Domestic production from Pemex's oil resources would presumably boost consumption even faster.

• • •

Banking and Trading Invasion

Of Brazil Launched by Grace & Co.

The long-awaited entry of W. R. Grace, titan of South America's West Coast, into Brazilian business is getting up steam. Count Michael Sieniawsky, representing the Grace National Bank of New York, arrived in Rio a few days ago announcing that his bank intends to open banking services in Rio and Sao Paulo.

Grace has also announced the formation of a trading company in Sao Paulo to be called Grace Mercantil S.A. It will be an export-import house with an initial capitalization of about \$750,000 in cruzeiros.

Grace, which built its West Coast empire on shipping and trading, has always skipped those activities in Brazil—preferring until now to invest in chemicals, plastics, and pulp and paper.

The company has announced a program of investment of \$20-million in Brazil during the next decade. Local traders believe these investments, plus its trading and banking activities, will one day make Grace an important commercial power on South America's East Coast.

• • •

Business Abroad Briefs

Juicy foreign profits: Although Sunbeam Corp. reported domestic sales off for the first two months of the current fiscal year, management said foreign subsidiaries will have no problem in achieving a 15% increase in sales and profits in the fiscal year ending next Mar. 31. . . . General Telephone Corp.'s foreign subsidiaries are expected to raise their sales this year to more than \$50-million. As late as 1954, sales were \$25-million.

European supermarketing: The first West German food supermarket with a sales area of 2,400 sq. yd. will be opened this year in Cologne by the Herbert Ekloeh AG firm. Ekloeh already operates 58 food chain stores in Germany, a majority of them small self-service stores. . . . Gottlieb Duttweiler, owner of the Swiss discount and supermarketing Migro organization, has branched out in West Germany. He plans to build a \$15-million to \$24-million refinery at Emden.

Bolivian oil concessions held by Glenn McCarthy have been transferred to four U.S. oil and gas companies. Companies involved in the Bolivian deal are Tennessee Gas Transmission Co., Houston, Union Oil & Gas Corp. of Louisiana, Lion Oil Div. of Monsanto Chemical Co., and Murphy Corp. of El Dorado. This is the second Latin American venture for the four companies who have acquired a Venezuelan concession.



FABRIC WITH "LUREX MM"†

For United Air Lines Interiors...

Designer Raymond Loewy selects luxurious fabrics highlighted by metallic yarns made with MYLAR®

**Stronger, more durable metallic yarn
...another example of versatility
found in DuPont "Mylar"® polyester film**

There's new luxury aloft in United Air Lines' ultramodern DC-7's, thanks to internationally known designer Raymond Loewy, Head of Raymond Loewy Associates. To complement the interior décor, Mr. Loewy selected a blue seat-cover fabric highlighted with sparkling gold metallic yarns made with DuPont "Mylar" polyester film.

According to Mr. Loewy, "The unusual strength and luster of these metallic yarns made with 'Mylar' provide a rich touch of luxury and long-lasting durability in areas of constant abrasion, flex, and wear."

These new metallic yarns made with tough "Mylar" film have opened up new opportunities for the textile industry to upgrade its products. Today, mills that make everything from nylon tricot for lingerie to cotton terry cloth for bath towels can use the glitter of metallics

to answer the public's demand for life and glamour in the products they buy.

HOW CAN YOU USE MYLAR?

Metallic yarns are only one example of industry's many uses for DuPont "Mylar". Whether you make guided missiles, or ladies' handbags, "Mylar"—or products made with "Mylar"—may help improve performance, lower costs or increase the over-all value of your product. For more facts on how you can use "Mylar"—or products made with "Mylar"—send in coupon below.



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®"MYLAR" is DuPont's registered trademark for its brand of polyester film.

†"LUREX MM" is a registered trademark for Döbeckmun's brand of metallic yarn made with metalized "Mylar".

In Canada, "Mylar" is sold by DuPont Company of Canada (1956) Limited, Films Div., P.O. Box 600, Montreal, Quebec.

☐ Please send me information on properties, applications and types of "Mylar" available (MB-11).

☐ Please send me information on metallic yarns made with "Mylar".

E. I. du Pont de Nemours & Co. (Inc.)
Film Dept., Room B-6, Nemours Bldg. Wilmington 98, Del.

Application _____

Name _____ Title _____

Firm _____

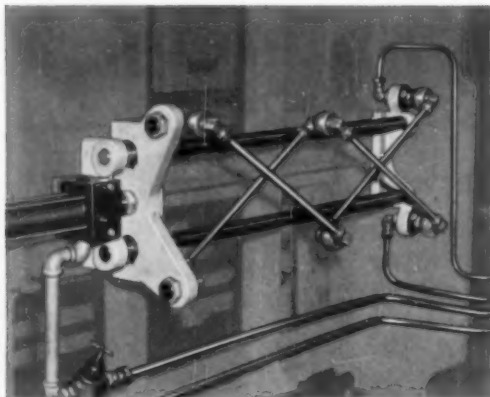
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IN EQUIPMENT DESIGN ■

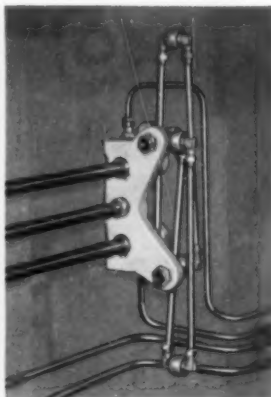
CHIKSAN SWIVEL JOINTS

SMOOTH OUT KNOTTY LINE PROBLEMS

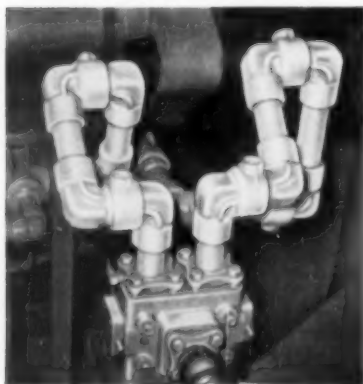


STEEL LINES FOLD LIKE AN ACCORDION

Connected to a moving head, these compact swivel jointed all-metal hydraulic lines flex and fold like an accordion on this automatic bottle unpacking machine.



When a machine's moving parts cause tight bend or twist on hose lines, Chiksan Swivel Joints provide a ready solution. When design dictates the use of metal lines, Chiksan Swivel Joints allow rubber-like flexibility. In fact, wherever line flexibility is required, designers and maintenance engineers know it's just good business to call on Chiksan. Precision made Chiksan Swivel Joints with their infinite service life, full 360° rotation and high safety factor, quickly pay for themselves by minimizing hose replacement and eliminating costly line failure, fluid loss and downtime. If your equipment hose lines require frequent replacement due to torsion or bend radii fatigue, or if flexible all metal lines are in order, contact Chiksan. A nearby representative will call, analyze your requirements, and make specific recommendations. Write today for his name.



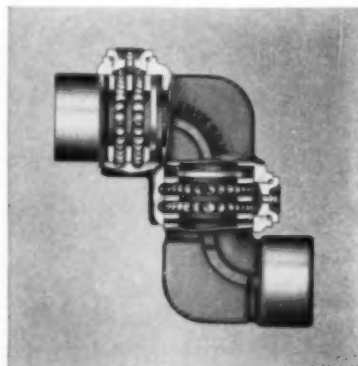
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INTERNATIONAL OUTLOOK

BUSINESS WEEK

JUNE 15, 1957



The prospects for economic integration in Western Europe looked brighter at midweek with the forming of a government in France.

The new French Premier, 42-year-old Radical Socialist Bourges-Maunoury, is pledged to quick ratification of the Common Market and Euratom treaties.

Ten members of the Bourges cabinet are holdovers from the Mollet government. In fact, the new team couldn't have been put together except that Mollet, against the wishes of his own Socialist party, swung his full weight behind Bourges. Mollet, a staunch "European," feared that a prolonged government crisis might dangerously delay, or even kill, the Rome treaties.

The one significant cabinet switch in Paris is the replacement of the aging Socialist, Paul Ramadier, as Finance Minister. In his place is Felix Gaillard, a 37-year-old Radical Socialist.

The new Finance Minister, unlike his predecessor, is known for rather orthodox economic views. Thus, he probably won't meet the same kind of opposition that Ramadier did from the conservative-minded Independents, whose support is needed if Bourges is to get a majority for the Rome treaties.

Gaillard himself is a strong supporter of European integration. He once worked as chief assistant to Jean Monnet, France's most persistent and enthusiastic "European."

The Bourges government hopes to get ratification of the Common Market and Euratom by July 7. That would give time for German ratification before the Bonn parliament recesses for the summer and for the upcoming German elections.

If Bourges succeeds in this, and in putting through some stopgap financial measures, he could stay in office until fall. At that time, though, he must put through a full-scale economic stabilization program (BW—Jun. 8'57,p148).

As for Algeria, Bourges intends to continue Mollet's tough Algerian policy—even to step up the French military campaign. But if he doesn't gain any more ground than Mollet did, France may have to revise its whole Algerian policy.

In the Middle East, things have definitely taken a turn for the better. It looks as if the West has turned the tables on Nasser and on the Russians. These developments of the past week or two tell a good part of the story:

- At a meeting of the Baghdad Pact in Karachi last week, the Northern Tier alliance looked stronger than ever. The British were back as full partners, no longer in the doghouse as they had been for some months after Suez. And the U. S. participated this time almost as a full member.
- The Arab League has become little more than an empty shell. A new pro-Western, increasingly anti-Nasser, grouping of Arab nations has taken shape. It includes Saudi Arabia, Jordan, Iraq, and Lebanon.

Egypt's Pres. Nasser now has his back to the wall. His effort to upset the monarchy in Jordan has backfired, rupturing his relations with Jordan and severely straining his ties with Saudi Arabia. About all Nasser can

INTERNATIONAL OUTLOOK (Continued)

BUSINESS WEEK
JUNE 15, 1957

hope for now is a nationalist victory in Algeria—something that isn't in the cards just yet.

To divert attention from his defeats, Nasser now is talking about building the Aswan High Dam from the Suez Canal revenues. Unless he gets Soviet help, this is a pure pipedream.

There is very little in reports that the London arms control talks have hit a snag over U. S. differences with our NATO allies.

Delays in the Western discussions result from the scope of the new U. S. proposals for arms control—and the seriousness with which they are being considered. There are no basic disagreements with Britain, France, and Canada, the other Western participants at London.

West Germany's Chancellor Adenauer naturally deplores even a limited arms control agreement without a Soviet backdown on German unification. But Adenauer has agreed not to try to block a genuine agreement—if the Russians are ready to sign.

The majority in Washington still holds that there's a better than even chance of striking a bargain with the Russians this summer.

Meanwhile, support is growing on Capitol Hill for some kind of arms control arrangement. Sen. Lyndon Johnson, majority leader of the Senate, this week backed Pres. Eisenhower's arms control proposals to the hilt. And a large group of Democrats quickly rallied behind him. Among Republicans, there's also growing support, though minority leader Sen. William Knowland is skeptical of Soviet willingness to accept anything genuine.

Public enthusiasm, fired by vague fears of radioactive fallout, has reached the point where some Washington officials are worried. They fear a dangerous disillusionment if little or nothing emerges from the London talks.

The Brazilian government has come up with an aid program for its coffee growers. The program will help cushion the effects of the ups and downs in the coffee market.

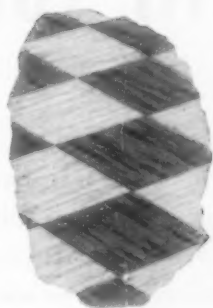
Brazil's coffee growers look on themselves as the nation's much-neglected breadwinners. Now, with a bumper coffee crop about to be marketed, they fear a sharp drop in prices. Prices already are at a 1957 low point.

The new coffee-aid program includes (1) government purchases of coffee whenever prices drop below a certain point, (2) bonuses to growers of higher-grade beans, and (3) government help in financing new equipment and fertilizer.

Provisional Pres. Aramburu—Argentina's man in the middle—is facing the worst troubles of his year-and-a-half in office.

Workers—many of them Peronistas—have been rioting and staging mass meetings to celebrate "Revolution Fortnight"—anniversary of three June revolutions, including the one that put Peron in power. Unions are calling a 24-hour work stoppage early next week. They demand that the government roll back prices to January, 1956, levels and rescind the wage freeze.

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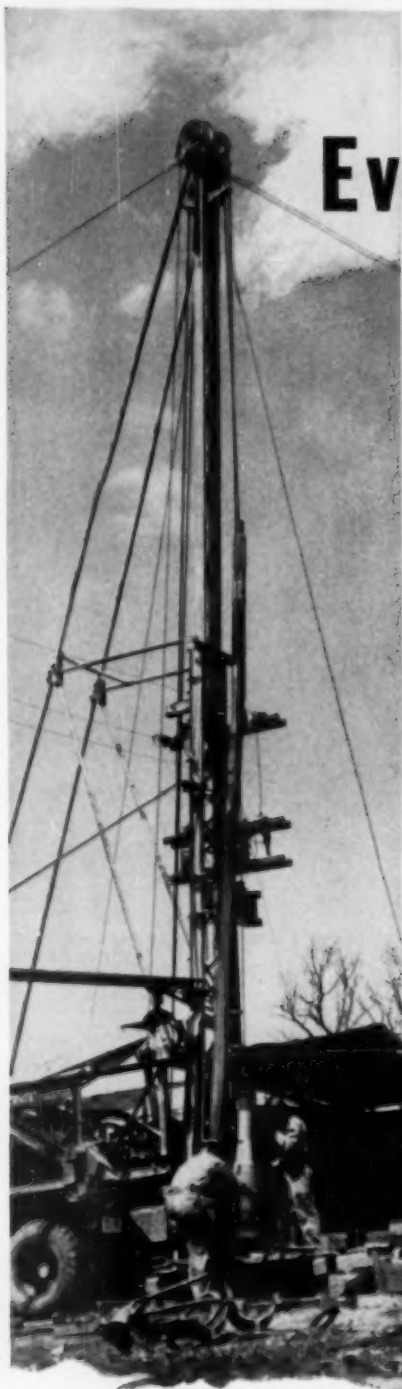
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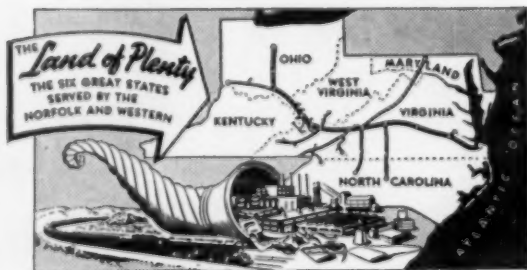
The way to find underground water is to drill where you think it is—without having to go through to China. Maybe you hit it at a profitable depth, maybe you don't. If you *don't*, you have to give up and move on. You've wasted a lot of time and money.

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Techniques Differ, but

Rubber and Auto Raises Tend to Balance

	Annual Bargaining	
	United Rubber Workers	United Auto Workers
1946	18½¢	18½¢
1947	11½¢	11½¢
1948	11¢	14¢
1949	Pensions	Pensions
	Annual Bargaining Continued	Escalator Pacts Adopted
1950	12¢	10¢
1951	13¢	14¢
1952	10¢	8¢
1953	5¢	7¢
1954	6½¢	3¢
1955	12¢	7¢ and SUB
1956	6.2¢ and SUB	12¢
1957	?	11¢ through June
TOTAL	105.7¢	116.0¢

Summaries of wage gains are not fully parallel where inequity adjustments were added to some URW pay gains. UAW claims to be 12¢ to 14¢ ahead of URW if straight pay rates are compared.

© BUSINESS WEEK

Rubber Tries to Bounce On Top

United Rubber Workers next month will demand substantial pay boosts—possibly 20¢ to 25¢ an hour—to put itself ahead of unions getting automatic increases.

Since there are no important auto or steel negotiations, the rubber industry talks may set this year's wage pattern.

WHAT COULD be the year's most important bargaining tilt will get under way soon after July 1, when the United Rubber Workers sits down with the Goodyear Tire & Rubber Co. to hammer out a settlement on wages. The resulting contract almost surely will be extended to all other major rubber companies.

The importance of the negotiations goes even beyond that. Other unions and industries with contracts open on wages this year will be watching. What happens at the Goodyear bargaining table will be a factor considered at others during the latter part of 1957.

There are no significant steel or auto negotiations to make this year's pattern. If there is to be a pattern, determined by bargaining rather than built-in wage increases in long-term

contracts (BW-May 11 '57, p. 151), then chances are it will be set by the rubber industry.

• **Automatic Pay Hikes**—There is no doubt that pay will climb for the rest of this year. Most major contracts in manufacturing run through 1957. They provide a combination of deferred wage increases and cost-of-living bonuses for millions of workers. The expectation in Washington is that raises under these contracts will total anywhere from 12¢ to 15¢ an hour before the year ends.

Such an increase will show up, automatically, in pay envelopes—without union negotiators having to lift a finger.

Under the circumstances, bargaining teams from rubber and other unions that have negotiating opportunities will go to management determined to

get more for their members than the automatic step-up provided in long-term contracts. Otherwise, why bargain? That's the attitude now being taken wherever wage talks are possible.

Thus, what other workers will get automatically becomes a starting point—not necessarily a settlement figure—for union negotiators.

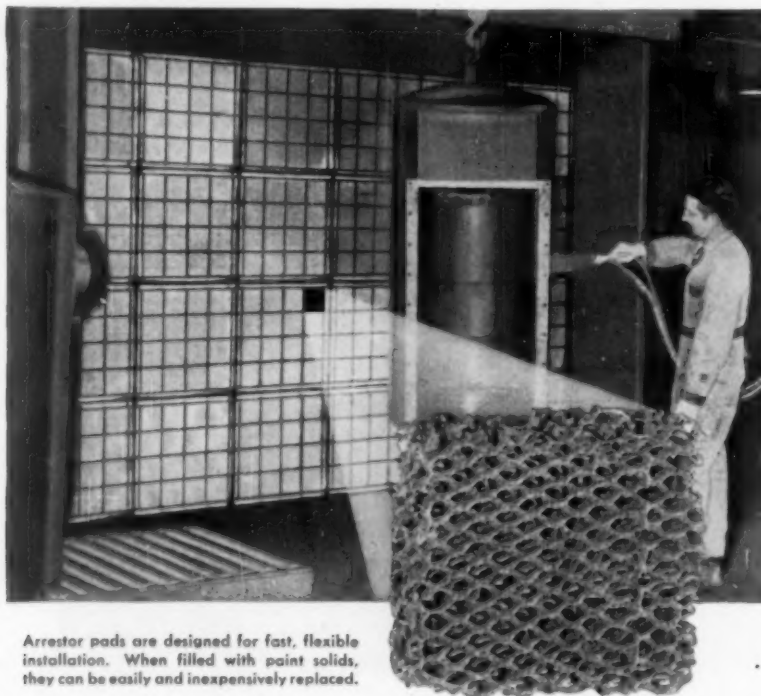
• **Rubber Contracts**—Because of the traditional bargaining militance of the URW, the contracts in the rubber industry are probably the most important that can be opened on pay this year.

The United Steelworkers has contracts covering the same number of workers—about 200,000—that expire this year. USW's wage policy committee met in Washington this week to outline demands for this group, mostly in fabricating and heavy steel machinery plants. The conference served as an occasion for some tough talk about the steel union's long-range goals. But it's hardly likely that USW will make a serious attempt to do more than extend the terms of its basic steel contracts to the allied branches of the industry.

The United Rubber Workers, on the other hand, will be starting out from

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scratch in its industry. Its goal will be to get as much as the others, plus something extra.

URW recently notified Goodyear that it wanted to negotiate new wage rates for 24,000 workers in 11 plants under a contract providing for a reopening on 60-day notice by either party. The deadline is July 22. Unless there is an agreement before then, the present agreement can be canceled—and URW will be free to strike if it wants to.

Goodyear is the first of the rubber "Big Four" facing wage negotiations. The others have later reopenings. URW's normal practice is to concentrate wage bargaining on a single company—a different one from year to year—and then demand the same settlement terms from the others.

• **What URW Wants**—The rubber unions and companies never give advance notice on what key issues are involved in their wage negotiations. URW officials still insist that they don't know exactly what—other than a "substantial and adequate" pay hike—may come up in the Goodyear talks.

Earlier this year, the union outlined an economic program for bargaining that lists objectives to be sought "when the time is appropriate," according to URW's president, Leland S. Buckmaster. These include such things as the elimination of differentials, adjustments to "correct existing inequities," and a wide assortment of fringes.

Whether these items can be brought up at all under the wage reopening clause could be a disputed issue. But there is no question about wages being far and away the most important matter coming up. And while nothing definite has been said about it, it's a good, informed guess that URW will ask something over 15¢ an hour—possibly 20¢ to 25¢ an hour.

Traditionally, URW has tried to keep basic wages of rubber workers up to those of members of the United Auto Workers because of the close relationship of the rubber and auto industries. There has been tacit recognition of this in the rubber companies. It's always been a factor in wage talks.

• **Closing the Gap**—As long as both industries bargained annually, the auto-rubber wage parity was easy to maintain. But since UAW accepted long-term contracts with cost-of-living adjustments, URW has almost always been lagging behind in pay at the time of its annual bargaining sessions. It has had a gap to bridge.

This year, the gap will be the widest in a long time. The auto workers will be an indicated 14¢ to 15¢ an hour ahead of the rubber workers when the URW begins bargaining with Goodyear. That's the very minimum boost URW negotiators will consider, and



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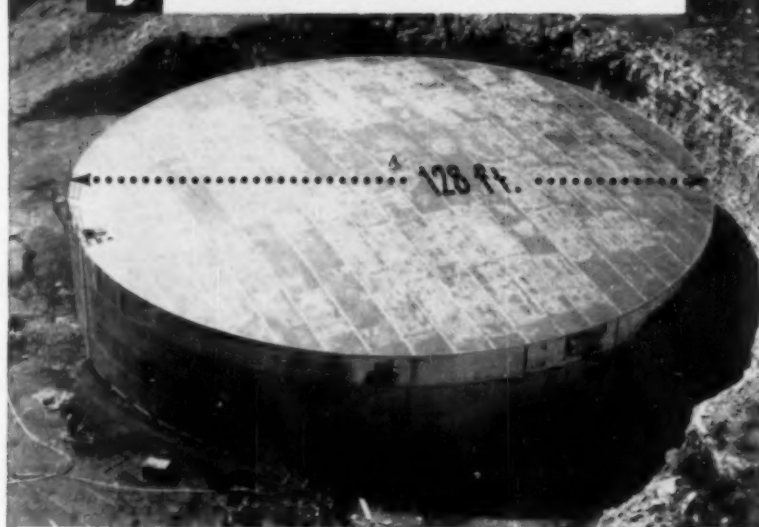


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they'll consider it only after a hard fight for up to a dime more.

In going after that additional cents-per-hour raise, URW will cite this fact: Last year, the rubber union caught up with UAW when it signed for a 6.2¢ an hour raise plus 3¢ an hour to be paid into a supplemental unemployment benefits fund. Almost immediately, the auto workers got a quarterly wage adjustment that put them out front again—and they've been moving ahead steadily all through the year.

This time, URW wants something on account.

• **Industry's Position**—The rubber industry has given no hints so far of its reaction to URW demands. Privately, company people admit that steep 1957 demands are inevitable in view of what has been happening to the cost-of-living index and auto's deferred pay hike.

At the same time, they feel that there is an economic danger in successive wage increases. They say that annual boosts in labor costs will have to stop someday, and that efforts should be made to slow down their advance.

But up to now, no company has been ready and willing to make a last ditch fight on this. Over-all, the industry seems more inclined to follow other industries on wages rather than set out very far on its own. This is largely a matter of expediency. As long as auto and steel workers get raises, and the cost of living continues rising, the tire manufacturers feel the cards are stacked against them; they're in a weak position.

• **Why Bargain Annually?**—Then why annual contracts in the rubber industry instead of long-term pacts such as those common in auto, steel, electrical manufacturing, and other industries?

URW minimizes the question. It says that only a small group of unions, although admittedly important ones, are riding the escalators in long-term contracts. The big majority are bargaining as they always have, annually.

Nevertheless, companies have suggested longer labor agreements with cost-of-living clauses in the past, and so has Buckmaster. But they've never been able to sell the idea to the union's rank-and-files.

The obvious and most widely accepted explanation is that the unionists don't want to be barred from the negotiating table and the opportunity to try to add more to basic pay than they could get through formula raises.

• **Other Reasons**—There are other reasons, too. One is that URW pay works on an incentive base; many locals fear employers might revise incentive factors—and affect pay—without their being able to do anything about it under long-term contracts. Moreover, locals frequently clear up major grievances at the annual bargaining. They feel it gives them more muscle.

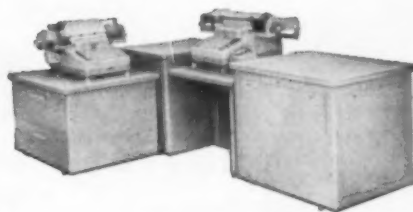
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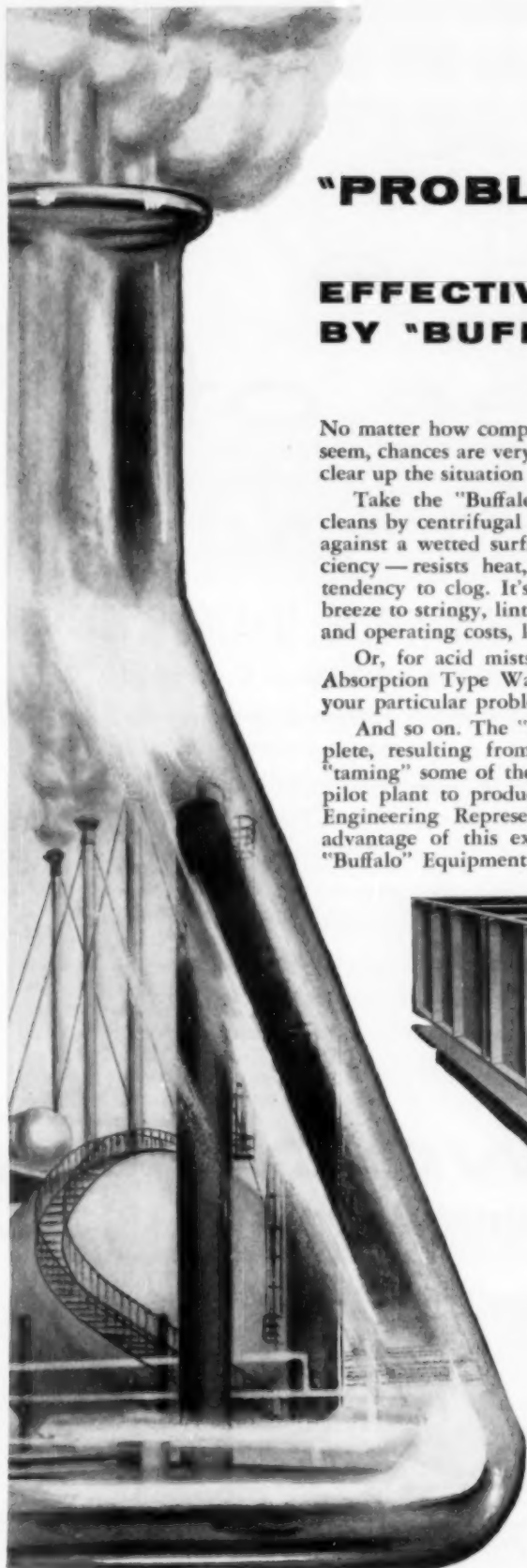
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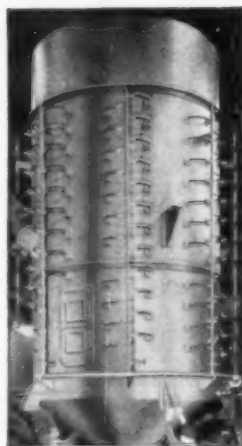
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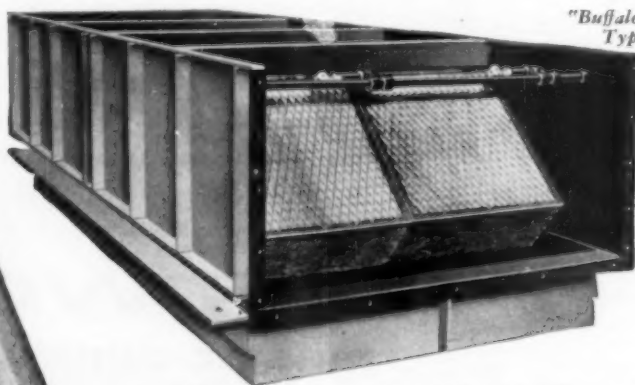
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Arbitration Ruling Has a Punch

The Supreme Court's decision that federal courts can enforce arbitration clauses is an important precedent. Still, it leaves unanswered many questions about legal status of agreements to arbitrate labor disputes.

A Supreme Court ruling that federal courts can enforce agreements to arbitrate was studied by professional arbitrators this week as "a decision of utmost importance" to labor and management. Unions hailed it as "new and important support for impartial arbitration," and as "a powerful strengthening of labor's hands" against employers who "have been able to flout arbitration awards which they don't like."

But, under this enthusiasm for a decision reaffirmed in three more cases this week, there's a growing belief that the high court's decision was narrow in scope—and no solution to the basic problem of establishing a sound relationship between arbitration and law.

The decision last week (BW—Jun. 8 '57, p159) raised questions that only experience can answer. And, with the first excitement ebbing, there are doubts about whether the arbitration process has actually been advanced the giant step that many believe.

• **Taft-Hartley Applied**—The court ruled (7-1) that agreements to arbitrate future disputes in industries affecting interstate commerce may be enforced through Sec. 301 of the Taft-Hartley Act. This section authorizes companies and unions to sue in federal court in case of breach of collective bargaining agreements. Labor has contended for seven years that this should be interpreted to empower federal courts to enforce arbitration clauses.

During that time, management or labor has gone into court on a number of occasions for an injunction to compel use of the arbitration process provided in the contract. The courts have split sharply. Several agreed that arbitration clauses should be applied on the same basis as any other contractual provision. Other courts were just as positive in their disagreement.

The Supreme Court decision of last week puts an end to this uncertainty. Justice William O. Douglas, who wrote the majority opinion, said that Sec. 301 "placed sanctions behind agreements to arbitrate grievance disputes."

He went on: "Plainly, the agreement to arbitrate grievance disputes is the quid pro quo for an agreement not to strike. Viewed in this light, the legislation does more than confer jurisdiction in the federal courts over labor organizations. It expresses a federal

policy that federal courts should enforce these agreements on behalf of or against labor organizations and that industrial peace can best be obtained only in that way."

• **Plus Values**—This decision does several things to strengthen the arbitration process.

• It is clear precedent for federal courts to enforce agreements to submit future disputes to arbitration.

• It supports the supremacy of the federal law over generally vague and inadequate state statutes under which arbitration clauses have frequently proved unenforceable.

• And it makes possible the use of injunctions to require arbitration—despite the Norris-LaGuardia Act, which limits injunctive relief in labor-management controversies and which had been widely interpreted to bar a writ against a party failing to comply with his agreement to arbitrate.

These are positive matters. Because of them, the American Arbitration Assn. hails the court decision as "a good and necessary step designed to cope with a specific difficulty." But association spokesmen as well as others in the field do not consider it a final and satisfactory answer to problems they face.

• **On the Negative**—For instance, the decision deals only with the enforcement of agreements to arbitrate. It has nothing specific to say about remedies that might be used if parties fail to comply in good faith with the conditions of arbitration—such as the selection of the arbitrator, agreement on a time and place for arbitration, and other steps necessary to get the "third man" settlement of disputes under way. In other words, arbitration may still be accepted, technically, but effectively stalled.

Professionals in the arbitration field feel that the Taft-Hartley Act doesn't offer the most satisfactory backing for private, impartial resolution of disputes through "consent of the governed." The act is still "too emotionally charged," they say, and still suffers from "complications resulting from conflict of federal and state laws."

As one commented: "It will undoubtedly be found that parties who are reluctant to arbitrate can still try to play off state and federal laws against

each other, [to] seek avenues of escape."

• **Remedies**—The arbitrators prefer one—or both—of two alternatives:

Amendment of the federal Arbitration Act to erase doubts that it applies to labor disputes. Courts have differed in interpreting a clause specifically excepting "contracts of employment of seamen, railroad employees, or any other class of workers engaged in foreign or interstate commerce." This question was involved in cases before the Supreme Court, but not ruled on.

Direct action by the states to adopt modern arbitration laws—particularly, the Uniform Arbitration Act endorsed by the American Arbitration Assn. and the American Bar Assn.

Fifteen states now have arbitration laws, but in only 11 of these are statutes applicable in varying degrees to labor disputes. The 11 are New York, New Jersey, Massachusetts, California, Pennsylvania, Connecticut, Rhode Island, Ohio, Wisconsin, Washington, and Minnesota. Florida's legislature has adopted the Uniform Arbitration Act; if the governor signs the measure, it will be the 16th state with a law and the 12th giving legal support to the arbitration of labor disputes.

In the other states, common law can be used to enforce arbitration decisions in most instances—but not to require arbitration under contracts providing for the "third man" procedure in future disputes. An agreement to arbitrate is revocable at will at any time before the actual handing down of an award under basic law; it cannot therefore be enforced in court in the absence of specific legal provisions making arbitration agreements enforceable.

• **At Last, Precedent**—That's why the Supreme Court ruling that T-H Sec. 301 applies is so important. It means that, for the first time, there is clear legal precedent for enforcing provisions for future arbitration.

Since 90% to 95% of an estimated 125,000 collective bargaining contracts already contain arbitration clauses, the decision isn't likely to result in any unusual expansion of the process. The American Arbitration Assn. recently reported consistent growth in the number of clauses in contracts—and in their use in avoiding labor-management strife. It said that its labor case load has increased 15% a year for the last four or five years—significantly, the years of expansion of long-term contracts.

There's been some speculation about the possibility that those who may have accepted arbitration clauses with tongue in cheek in the past may now try to get out of the "third man" system in next bargaining. The professional association

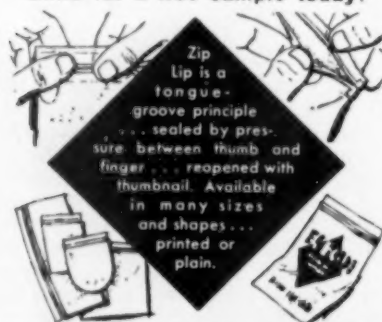


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doubts this. It says that "attempts to escape arbitration have been rare," and contends that few, if any, have signed arbitration agreements in bad faith.

• **Future Effects**—Where disputes have arisen over the use of arbitration, special circumstances have usually been involved. Frequently, the real issue was

not whether there should be arbitration but whether an issue was arbitrable.

Hence, the enthusiasm over the Supreme Court decision may prove baseless. It may not make any substantial difference in the number of contracts specifying arbitration or in the parties' willingness to observe them.

AFL-CIO is Wary on Carpenters

Fifth Amendment plea by union's president is a real threat to labor solidarity. Headquarters won't rush action.

The AFL-CIO may face a serious threat to its post-merger solidarity as a result of a Fifth Amendment plea by the Carpenters' president, Maurice Hutcheson, before a Senate Public Roads subcommittee this week.

The 60-year-old head of the 800,000-member Carpenters is a highly respected member of the federation's executive council. He is also one of the most influential men in the AFL-CIO Building & Construction Trades Dept., the center—and hotbed—of craft unionism in the merged labor movement. He has frequently been at odds with one-time CIO union leaders.

Hutcheson was called before the Senate subcommittee to testify on charges that he received \$15,500 as a share of an \$80,000 profit made from an Indiana land investment. The deal for a prospective roadway allegedly involved former Indiana state road officials and Hutcheson and two other Carpenters' officials, Vice-Pres. William Blaier and Secy.-Treas. Frank Chapman.

• **Jolt to AFL-CIO**—Hutcheson and the other Carpenters officials invoked the Fifth Amendment to avoid answering questions. This jolted AFL-CIO headquarters. Under federation rules, union officers must not use the Fifth Amendment to escape testimony on a matter involving corruption; AFL-CIO's code of ethics for union leaders says flatly that anyone who does "has no right to hold office in his union."

Hutcheson was one of several who abstained from voting when this rule was passed.

Shortly after that, Dave Beck of the Teamsters invoked the Fifth Amendment before a Senate committee. It took AFL-CIO Pres. George Meany just 17 seconds to set in motion action against Beck, he said later. He summoned the Teamsters president to appear before a special council meeting. That meeting, with Hutcheson present, unanimously voted to expel Beck from the council.

Advised of the Hutcheson use of the amendment, Meany announced that the matter would be taken up at the earliest opportunity—presumably at the next scheduled council meeting in August.

Where Beck was concerned, nobody outside the Teamsters disagreed about the propriety of fast and drastic action against him within AFL-CIO. However, Hutcheson has important friends and bloc support. There's concern in top leadership that action against Hutcheson—following that against Beck—might set off serious trouble.

• **Go-Slow Policy**—To avoid creating a new issue for conflict, Meany and close advisers feel that a go-slow policy on Hutcheson is necessary. They are inclined to wait for the outcome of whatever legal steps may be taken against the Carpenters official in the Indiana case—or, possibly, on what might come out of Senate Select McClellan Committee probing into the craft union's affairs.

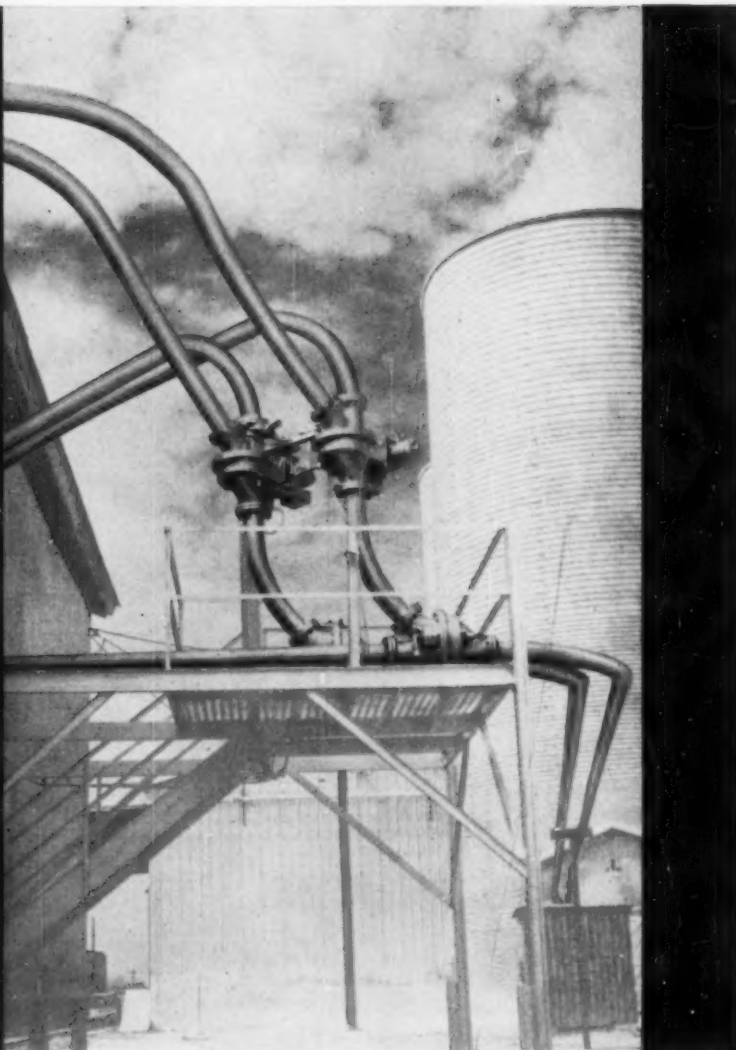
The committee's staff has been investigating "reports" about officials of the Carpenters and some of the union's locals. Although no date has been set for hearings, it's likely that Hutcheson's use of the Fifth Amendment will lift the Carpenters into a top-priority spot on the committee agenda.

• **Dynasty**—Until his testimony this week, Hutcheson had managed pretty well to live down the opprobrium attached to him as the "first inheritor of a U.S. labor union." His father, the late William "Big Bill" Hutcheson, one of the most colorful labor figures of the last generation, had served for many decades as international president of the Carpenters. When he retired, his son took over his office and the "Hutcheson dynasty" became a sour joke in some labor circles.

The Hutchesons—father and son—have been noted for three principal distinctions in the labor hierarchy. They were bitterly opposed to industrial-type unions—one of the most dramatic passages in the struggle between craft and industrial-minded labor officials was a fist fight between the elder Hutcheson and John L. Lewis on the floor of the AFL convention in 1935. Both Hutchesons won rank among the toughest fighters in the labor movement for jurisdiction for their union against the field. And both Hutchesons have been lifelong, active Republicans. **END**

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In Labor

• • •

Insurance Groups Urge Limited Law To Guard Employee Welfare Funds

Three insurance associations last week told a Senate labor subcommittee that they favor limited legislation to "prevent misuse and diversification of the funds of employee welfare programs."

But, a spokesman said, lawmakers should avoid "unnecessary requirements that may lead to burdensome and costly procedures on the part of managers of welfare programs, the government, and insurance companies."

They warned that a failure to do this would "increase the cost of operation of such programs, reduce the benefits available, or otherwise interfere with the healthy growth of these programs without corresponding public benefit."

The three groups that write almost all group life and health insurance are the American Life Convention, the Health Insurance Assn. of America, and the Life Insurance Assn. of America. They support control bills introduced by Sens. Gordon Allott (R-Colo.) and Barry Goldwater (R-Ariz.). Association spokesmen say the Allott-Goldwater program—which would exempt management-run welfare plans from disclosure rules—avoids "sweeping in the large majority of programs."

The associations oppose the Administration bill and that sponsored by Sen. Paul Douglas (D-Ill.) which would apply registration, reporting, and disclosure rules to all welfare funds, including those run exclusively by employers.

Labor conditions its support for control legislation on the coverage of all funds—those run exclusively by management along with the others.

In testimony before the Senate subcommittee, AFL-CIO Pres. George Meany said that labor feels that "employer-administered plans are, if anything, more rather than less susceptible to abuse than are jointly administered plans." He cited a number of employer-administered plans, including one in effect for General Electric Co. employees.

Meany told the Senate group that conditions existing in some of these "would, if union officers were responsible, constitute violations of no less than seven of the ethical standards" set by AFL-CIO for union health-welfare fund administrators. He cited secrecy, a lack of "meaningful reports," no competitive bidding for insurance coverage, and business given to firms in which officials have a personal interest as "abuses" under labor's ethical codes.

Companies cited by Meany took sharp issue with his testimony. General Electric released a point-by-point denial of the AFL-CIO "abuse" charges. GE pointed out:

- The amount paid by its employees is fixed by union agreements, with GE paying the entire balance; only GE, not employees, would "suffer if anything less than the best available rate were paid" for insurance.

- GE began doing business with the Metropolitan

Life Insurance Co. in 1920, and its program has been "carefully reviewed with each renewal, and . . . in our opinion [is] the best available we can obtain for our needs."

- The business connection with Metropolitan began long before any GE officials became Metropolitan directors, and those who later "became directors . . . in the public interest [are not] in any position to profit in the slightest from the business Metropolitan does with General Electric."

- The company issues periodic statements "as to each individual's share in the plans," and full annual reports.

GE criticized Meany's "unwarranted charges" and expressed its "hope" that "this is not just a carefully timed attempt to discredit reputable companies in order to divert the spotlight from the current unfavorable disclosures on activities of some union officials."

• • •

Court's Decision on Union Records

Hobbles Probers of Labor Racketeering

The U.S. Supreme Court ruled this week that the "custodian" of a union's books may be prosecuted if he fails to produce them under subpoena, but may not be jailed for contempt if he invokes the Fifth Amendment in refusing to disclose where the records may be found.

The decision came as a setback to government investigators probing charges of racketeering in the New York trucking and garment industries. However, its significance is that federal probers must adopt new tactics and perhaps move more slowly in going after union records—not that the government may be barred from access to the documents.

The Supreme Court's unanimous ruling freed Joseph Curcio, secretary-treasurer of a New York Teamsters local, from a six-month sentence for refusing to answer grand jury questions about the whereabouts of subpoenaed Teamsters records.

Justice Barton, who wrote the court decision, commented:

"The compulsory production of corporate or association records by their custodian is readily justifiable . . . because he does not own the records. . . . However, forcing the custodian to testify orally as to the whereabouts of nonproduced records requires him to disclose the contents of his mind. He might be compelled to convict himself out of his own mouth. That is contrary to the spirit and letter of the Fifth Amendment."

Curcio was subpoenaed in connection with charges that a Teamsters faction chartered seven "paper" locals in order to win control of the New York joint council, and that these were "phantom unions" controlled by gangsters, ex-convicts, and labor racketeers. He was told to bring union records with him. Curcio did not do so when he appeared and refused to answer probers' questions about where the books were. Instead, he invoked the Fifth Amendment as a protection against possible self-incriminating testimony.

The government prosecuted for contempt, on the basis of the refusal to answer questions. It argued this would be the quickest way to get the records.

The Future of the Income Tax

GVA

THE steeply progressive rates of the individual income tax yield surprisingly little revenue to the Treasury. The National Association of Manufacturers has calculated that, if all taxable individual income in 1956 had been taxed at the basic rate of 20 per cent, instead of rates ranging up to 91 per cent, the Treasury would have lost less than \$5½ billion, about one-sixth of its revenue from the individual income tax alone and one-thirteenth of its net receipts from all sources. The NAM's estimates indicate that, if progression had stopped at 50 per cent instead of 91 per cent, the revenue loss to the Treasury would have been less than \$1 billion.

Can Sacrifice Be Measured?

The case for progression, therefore, must stand or fall on its economic desirability, not on the Treasury's need for revenue. What is to be said for progression on economic grounds? The sacrifice or hardship suffered by a taxpayer is a purely subjective phenomenon, not measurable in dollars and not comparable as between taxpayers. Even if differences in the "marginal utility of the income dollar" be accepted as an abstract economic principle, who is to measure the differences and balance them against the effort, diligence, fixity of purpose, strength of character, and nervous output that went into the earning of additional dollars by individuals?

Who is to say, for example, that a tax of 91 cents on each additional income dollar at the \$200,000 taxable-income level or a 50-cent tax rate at the \$18,000 level causes more or less sacrifice and hardship than a 20-cent tax at the \$2,000 level? Is it the function of the Government to answer these unanswerable questions, and to trans-

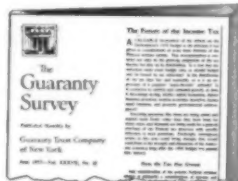
late the answers into tax rates that amount to virtually complete confiscation of income? Is this equality before the law?

Practical Effects of Progression

When the practical economic effects of steep progression are considered, the argument rests upon somewhat firmer ground. Irrespective of theoretical considerations of equity, steeply graduated rates tend to penalize productive effort by those who have the most to contribute to economic growth and expansion. They drive capital funds into tax-exempt channels and promote governmental waste and extravagance. They encourage dishonest tax avoidance and place a premium on corrupt practices by taxpayers and tax collectors alike. They distort the pattern of economic activity by causing business decisions to be made on the basis of tax advantage rather than real economic desirability. They lead to competitive scrambles for legislative favors. They reduce the mobility of both labor and capital by discouraging the payment of wages and salaries and the distribution of earnings in the form of ordinary income taxable at full statutory rates. They inhibit the flow of venture capital which is essential to the maintenance of a strong, dynamic, flexible economy.

From the June issue of THE GUARANTY SURVEY, monthly review of business and economic conditions published by Guaranty Trust Company of New York.

The complete issue is available on request.



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THE MARKETS

Wall St. Talks . . .

. . . about effects of GM-du Pont decision . . . demand for Schering stock . . . high cost of borrowing.

Even the smartest Street analysts confess, after study, that they can't evaluate all possible consequences of the Supreme Court's du Pont-GM decision. They say clarification will come only through further, probably long-drawn-out, court tests. However, brokers report some side effects already. A few investors, for example, are buying on the strength of a guess that American Smelting & Refining might eventually spin off to stockholders its shares in Revere Copper & Brass and General Cable.

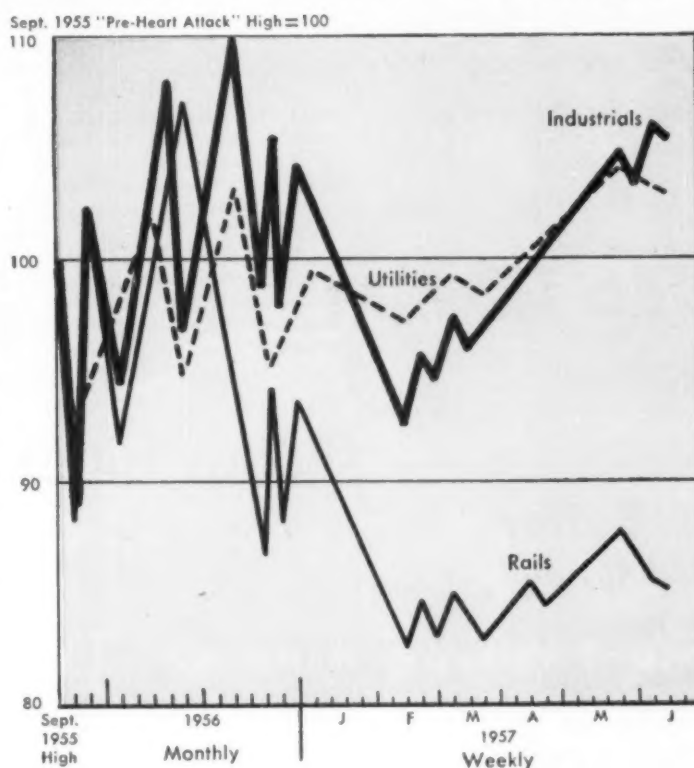
Heavy demand for Schering Corp. shares is attributed to someone's buying for control. The price of the stock has recently kited 20% to around \$83; in mid-February, you could have bought it for a low of \$48.25. Management of the drug company reportedly hasn't been able to find out who is behind the buying. Executives insist that no negotiations are under way for sale or merger of the company.

Latest tight-money victim is the New York Central. This week, the road offered \$6.5-million in new equipment trust obligations. But the best bid would have entailed a borrowing cost of 5.655%, so the Central called the whole thing off. Last March, its borrowing cost on equipment certificates was only 4.55%.

Nothing to the rumors: That's what Pres. John Lawrence of Joy Mfg. says about reports his company might merge with Cooper-Bessemer Corp. . . . It's also what Texas Gulf Producing says about Wall Street talk about mergers involving that company. . . . Kansas City Public Service Co. denies it will sell its transit system to the city. . . . Sunrise Supermarkets denies rumors that it is considering selling out to A&P but admits merger talks with "a sizable food chain."

Something to the rumor: Anheuser-Busch admits that there have been some discussions of acquiring New York City's big Jacob Ruppert brewery, but it denies that negotiations have gone beyond the exploratory stage. It terms "ridiculous" the reports that it has already offered \$18 a share for Ruppert stock.

The Market's Post "Heart Attack" Ups-And-Downs



Data: Standard & Poor's Daily Stock Price Index.

Rally Was Strong, Swift

Industrials expected to reach new peak, after their comeback from the news of President Eisenhower's latest illness.

INVESTORS and traders this week hastily stopped using their private appraisals of the business news as the No. 1 yardstick for measuring the stock market. Instead, they grabbed up another measure that had served them twice before: one man's health.

Early on Monday morning came the news of Pres. Eisenhower's latest illness, and the market promptly fell into a tizzy. From then on till midweek the pattern worked out like this:

At the start, selling orders cascaded in, developing a volume that had the Big Board ticker running late for well over an hour—as much as 14 minutes late at one moment. Market values all through the lists evaporated rapidly; some rather wild Street guesses put the paper loss at \$2-billion.

The Comeback—Then, before any real panic could develop, it became apparent that the first "sick" report

was not going to be followed up by even more alarming announcements, as had happened on the President's earlier illnesses. By noon of Monday the fall had stopped and stocks were rallying smartly; on Tuesday, there was more of the same. On Wednesday, the upward move was a bit more sedate, but by the close Standard & Poor's industrial index—most popular of S&P's three daily indicators—had climbed to its 1957 peak, not far below the all-time record set last August.

As always, Wall Street opinion is divided as to whether the swift resurgence from Monday's early despair indicates that industrial stocks will score an immediate and decisive penetration of the record high set 10 months ago. Most analysts do agree that a penetration may come fairly soon, but they split on what will happen after the first breakthrough.

The numerous fervent bulls say the penetration will mean that the bull market forces that have been felt since mid-1949 are again in the ascendancy, and that there will be a further substantial rise.

Saw-Tooth—Less sanguine observers

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feel that whatever new peak is reached will eventually prove to have been just one more pinnacle in the saw-tooth performance put on so long by the industries (chart, page 159). They think that the market's basic strength will just suffice to get it past the old high, after which a consolidating period will move it down to levels well below the present. The duration of its stay at this lower level, they say, will depend on general business news and the economic outlook.

The more emphatic bears admit that this picture may have the right lines, but claim that the colors are far too bright. They believe that more market students should pay attention to these disturbing factors:

- Selectivity, both between market groups and inside them.
- The wide price swings up and down in individual stocks.
- Increasing signs that all too many investors are using the shut-your-eyes-and-point method of selecting stocks.
- The poor performance of the rail index, at a time when the industrial average is rising.
- Alarming signs visible in various important business indexes.

From all this the ultra-bears in the Street conclude that there will have to be a determined—and successful—testing of the mid-February lows before any real climb is possible above last summer's highs.

Bonds Hit Skids in London

The U.S. isn't the only country worrying about bond market conditions (page 86). A five-month slide in British government securities has produced heated discussions in London about monetary policy, inflation, and debt management.

There are a number of differences between the U.S. and British government bond markets (BW-Jun. 1 '57, p99). The Bank of England and Britain's Treasury cooperate much more closely than the Federal Reserve and the U.S. Treasury. Under the British system of dual control, both the Treasury and the central bank are involved in monetary management: with the Bank of England taking full responsibility for open market operations. It does not actually peg prices on governments, but acts to stabilize the market and smooth the path for Treasury financings.

• **British Tactics**—Here's what the Bank of England and the Treasury have done so far this year:

• In January, they sold a huge packet of long-term governments in the open market. This was done while bond prices were rising at the end of the Suez crisis and there was widespread expectation of a cut in the bank rate. This enabled them to redeem almost \$2-billion of short-term Treasury bills—an unusually large operation. In England government issues are normally fed to the market in dribs and drabs rather than in large clumps, as in the U.S.

• In February, they cut the bank rate from 5½% to 5%, but continued to sell long-term bonds—including the so-called "eternities" that mature in 1999 to 2004—whenever the market came up for air.

• They continued to encourage the steady non-bank demand for Treasury

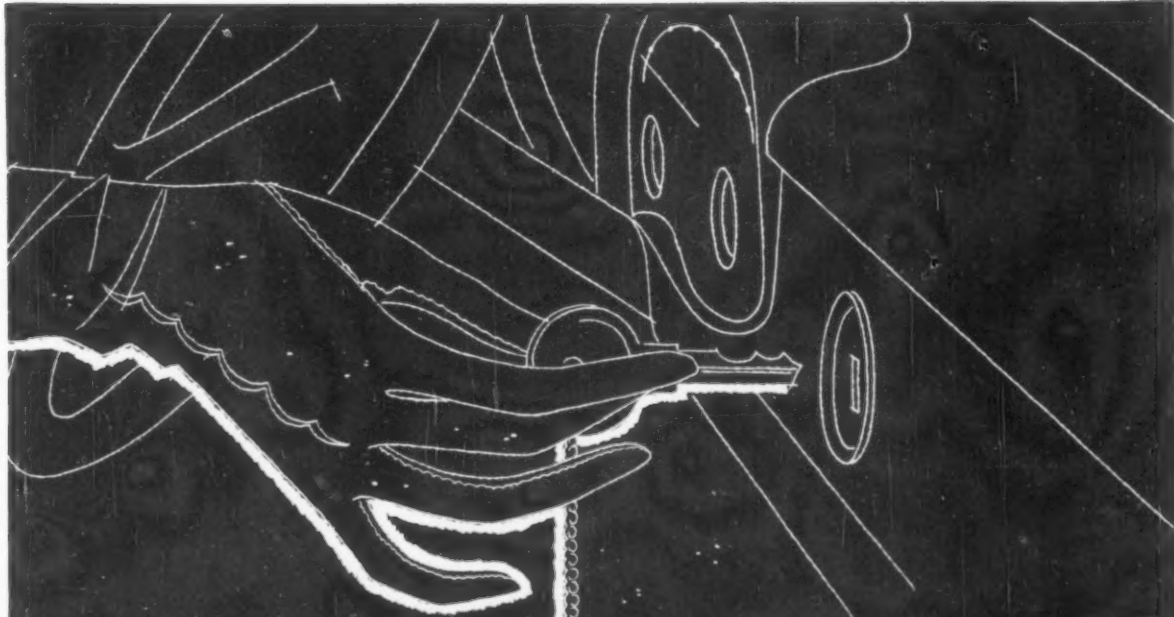
bills. By doing this in the face of a cut in total short-term bill supply, they pushed the 90-day bill rate from nearly 5% to little more than 3%—though it has lately rebounded to about 3½%.

• **Remade Rate Structure**—The upshot is that the Bank of England and the Treasury have pulled apart the rate structure, forcing down the rate for the government's 90-day bills and intermediary bonds and holding the long-term bond rate to around 5%. This helps the Treasury with its balance of payments problem, because a large portion of the \$11.2-billion worth of foreign-owned sterling deposits held in London are invested in Treasury bills and short-term bonds. The lower the interest on these securities, the less the strain on Britain's reserves.

But the big bond investors—the banks, insurance companies, and pension funds—had looked forward to a rise in bond prices, and they were disappointed when the government's operations headed it off. They have now turned bearish on bonds and have practically stopped buying except on the shortest-term. At the same time, they are busy selling some of their holdings. They feel the long-term market is too unsettled for comfort at present. Moreover, there is plenty of demand for long-term money from corporations, real estate interests, municipalities.

• **Danger**—The irritation of the large investors is the chief immediate cause of the bond slump. And it runs along the same track as a long-term trend, potentially even more dangerous—the shift of big investors from bonds to stocks in growing numbers.

No one knows how to halt the drift away from bonds, except by stopping inflation. And no one knows quite how to do that. **END**



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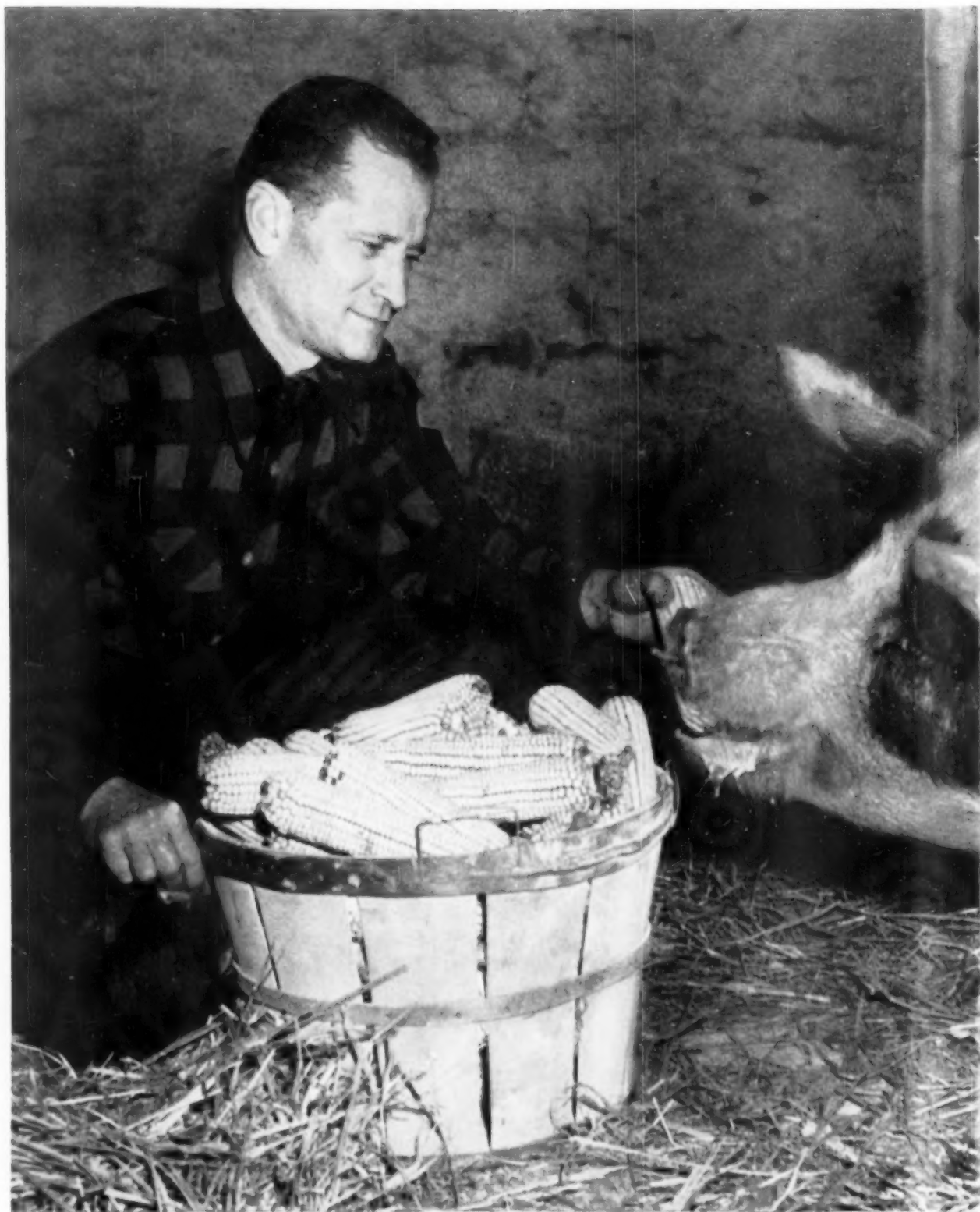
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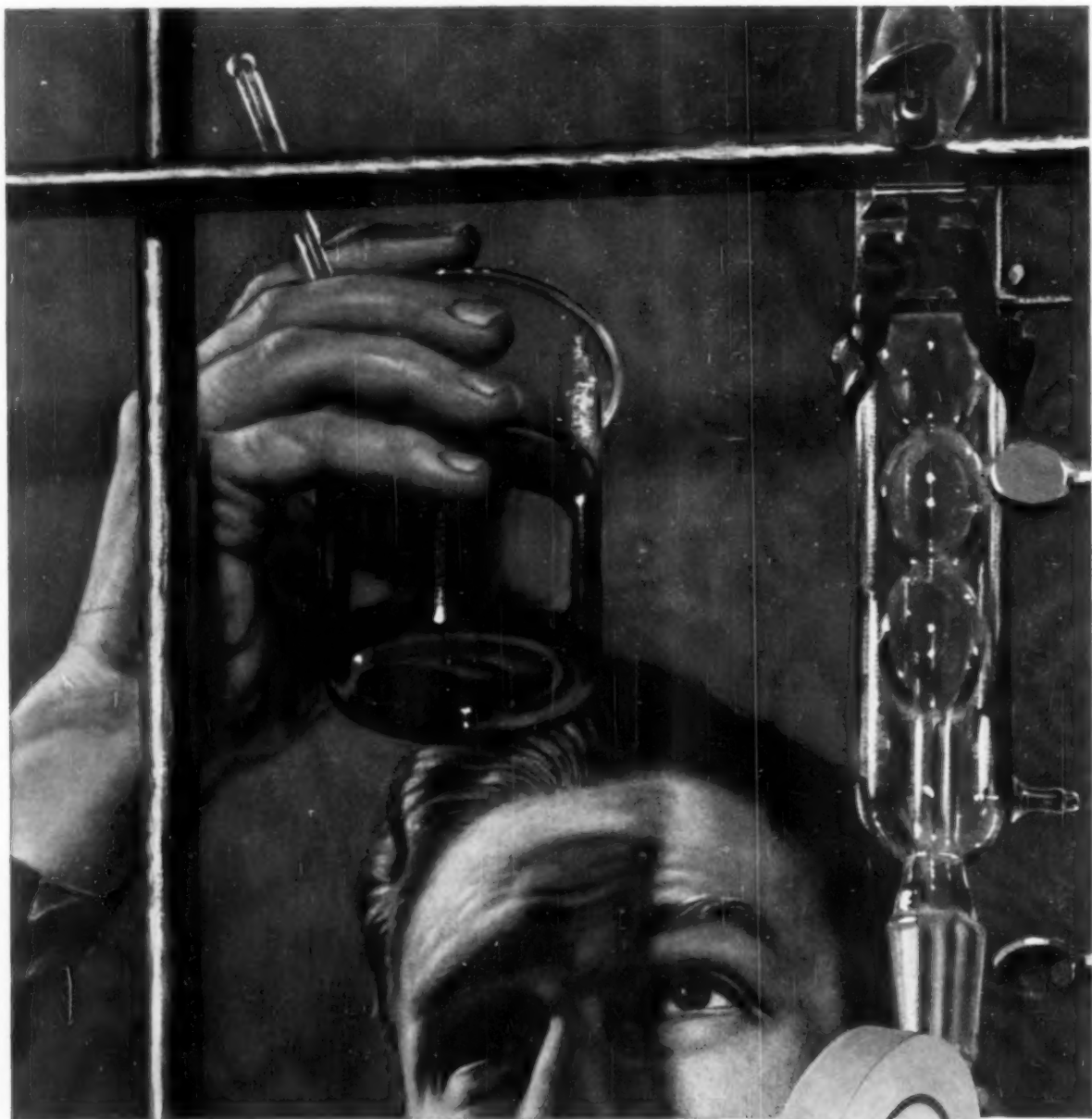
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PERSONAL BUSINESS

BUSINESS WEEK

JUNE 15, 1957



Perhaps, if you're a non-financial executive, you've never bothered to dig into the tax-saving side of company pension and profit-sharing plans. You may have overlooked some of the promising possibilities in an extremely liberal section of the tax law—a section that can help high-bracket people salt away sizable sums for their old age.

If you're a policymaking executive, or owner-manager of a family business, it would pay to look into this chance for **important deferred compensation advantages**—for yourself and other executives in your company.

Today, according to a new survey, over 30,000 U.S. companies have pension or profit-sharing programs. **Profit-sharing plans, particularly, have grown fast in recent years.**

There's a triple-barreled tax incentive behind many of these plans: (1) the chance for a tax-free buildup of retirement funds by career employees and executives; (2) the privilege of pushing high-bracket income ahead into low-bracket retirement years; and (3) the chance for low-rate, capital gains tax treatment of a "nest egg" that can expand into a considerable sum over the years.

Here's one tipoff on how much this triple tax advantage can mean—and how thoroughly some businessmen and their advisers have become "sold" on it: Many partnerships and sole proprietorships have actually incorporated just so their owners could be classed as "employees" and thus become eligible for coverage under these plans.

There are two general types of plans that can be "qualified" by the Treasury. Basically, both are simple. Under a **pension plan**, the company contributes a definite amount each year to the pension trust, regardless of profits. Sometimes the participating employees contribute, too. Retirement benefits vary a lot—usually the executive receives a retirement pension ranging from 10% to 50% of his final salary.

Under a **profit-sharing plan**, the company's annual contribution to the trust is not a fixed sum, but rather a specified percentage of net profits, generally from 5% to 20%. This contribution (under a "qualified" plan) may not exceed 15% of the payroll of those covered.

To get **Treasury-qualified status**, either type plan must meet three requirements: (1) It must be "permanent"—that is, not subject to termination for any cause other than business necessity; (2) it must be non-discriminatory—meaning that though it can be limited to stated classes of employees, such as those with a specified seniority, it may not arbitrarily favor certain individuals; (3) it must be "non-refundable"—that means the company can't get back any money once paid in.

Generally, businessmen have not found these "qualification" hurdles too high—the advantages, in most cases, have made them well worthwhile.

Here's what you get in tax benefits, as a high-bracket man—whether you're an executive in a large concern, or owner-manager of a family corporation:

- You pay no current income tax on the money the company contributes from year to year to the pension or profit-sharing trust for your benefit. You are taxed only when the benefits are actually received.
- You get taxed at the low capital gains rate if the total benefits are paid

PERSONAL BUSINESS (Continued)

BUSINESS WEEK

JUNE 15, 1957

to you within a year of your retirement. This means the rate will not be over 25%, and will be less if your tax bracket is under 50% (\$32,000). **It's one of the biggest breaks you'll find anywhere in the tax law.**

• **If your retirement payments are spread out over the period of your life expectancy, then you are taxed at ordinary income rates (except that, of course, you're not taxed on the part of your retirement payments that constitutes a return of the contributions you made yourself—that part was taxed at the time you earned it).** Here, although you are taxed at the higher rate, **your over-all saving is usually great—you have pushed the high-bracket income earned before retirement (the company's contribution) into low-bracket retirement years.**

A final major point—and this adds extra punch to the whole idea—is that a qualified pension or profit-sharing trust itself is tax-exempt. It's not taxed on any income it earns from investment of contributed funds. Result is a **rapid tax-free buildup of the fund.**

Here's a quick example to give you an idea how far-reaching the result can be—with a "qualified" plan of either type:

Say your salary is \$52,000. If you get a \$5,000 increase, you'll keep just \$1,900 of it. If you invested that \$1,900 at 4%, at the end of 10 years you'd have \$2,800 (less tax). But if your company puts \$5,000 into a qualified plan (for your account), here's what happens: (1) The full \$5,000 can be invested for your benefit by the trust. (2) If you retire after 10 years, the \$5,000 (invested at 4%) will have grown to \$7,400. (3) If you get a lump-sum payment when you retire (taxed at the capital gains rate), your tax will be \$1,850. **You keep \$5,550.**



If someone in your family is going abroad for the first time—or if you're hurrying with plans for a voyage yourself—**here are some last-minute reminders on healthy traveling:**

Motion sickness can make even the hardest traveler turn green, but if you think you may feel queasy, here are a couple of things to do. Aboard ship: Stay amidship if you can—not fore or aft. On a plane: Don't sit on the left side behind the wing—especially on a smaller plane flying in daylight (because of banking).

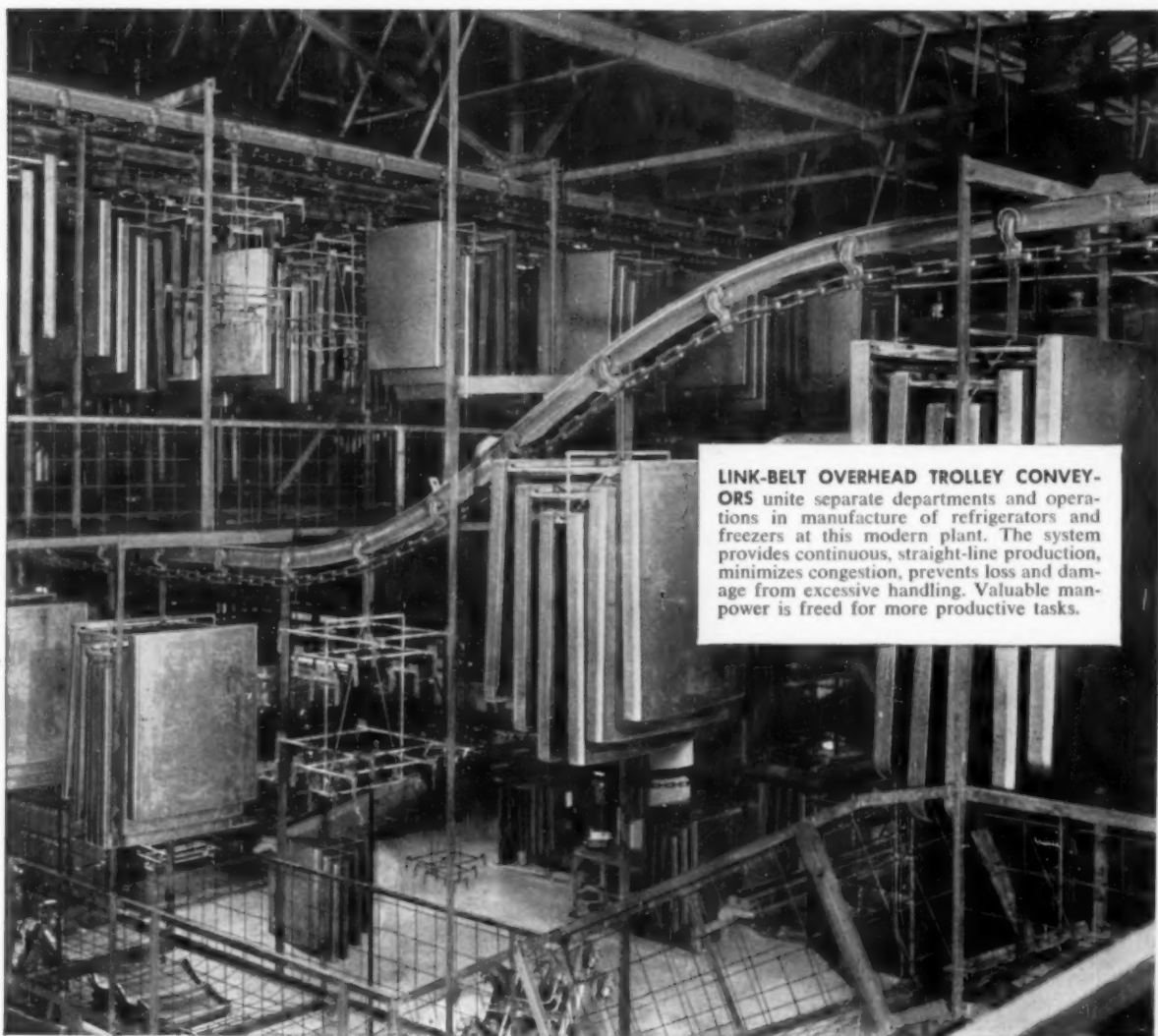
Most airliners and ships provide **motion sickness pills**, but if you want to carry an extra supply here are a few good ones: Artane (Lederle), Benadryl (Parke, Davis), Bonamine (Pfizer), Cogentin (Sharpe & Dohme), Dramamine (Searle), and Trimeton (Schering). But check with your doctor.

Your **traveling medical kit** should include a thermometer, aspirin, bismuth salts or kaolin (paregoric substitutes), antihistaminic inhaler or nose drops, insecticide spray bomb, an elastic bandage for sprains, and any antibiotics recommended by your physician.

Eat lightly and stick to the foods you're used to that are easily digestible. Experiment with unusual foods gradually. To be sure the water you drink is safe, here are a few **good bottled waters to ask for:** Spa Monopole (Belgium), Apollinaris (Germany), Vichy or Spuit (Holland), San Pellegrino or Recoaro (Italy), Solaris or Insalus (Spain), and Evian, Vichy, or Perrier (France and Great Britain).

And if you have any **specific health problem or allergy to drugs**, it's a good idea to carry a letter from your physician explaining this (and perhaps his phone number) in case of an emergency far from home.

How to make "overhead" an asset



LINK-BELT OVERHEAD TROLLEY CONVEYORS unite separate departments and operations in manufacture of refrigerators and freezers at this modern plant. The system provides continuous, straight-line production, minimizes congestion, prevents loss and damage from excessive handling. Valuable manpower is freed for more productive tasks.

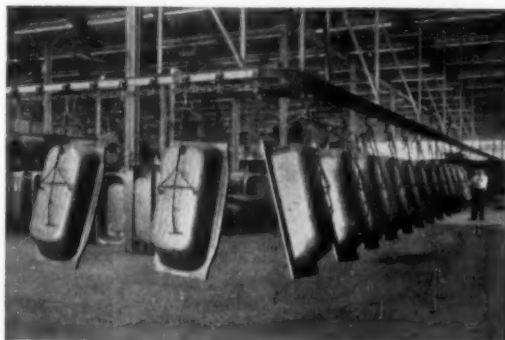
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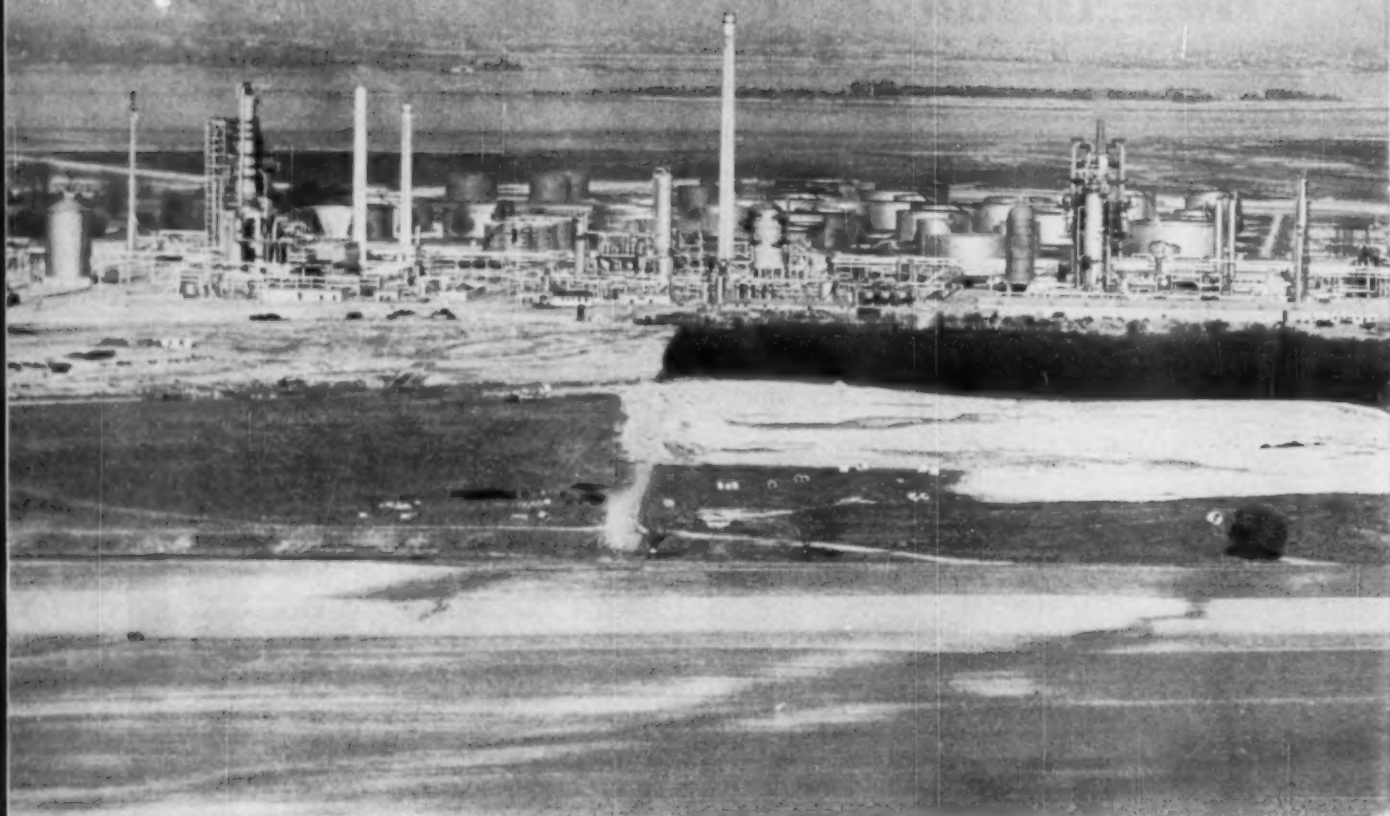
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PRODUCTION



OLD REFINERY at Bayonne, N. J.—Tidewater's headquarters for 66 years—was obsolete, and plagued by high local taxes and bad labor relations.

Tidewater

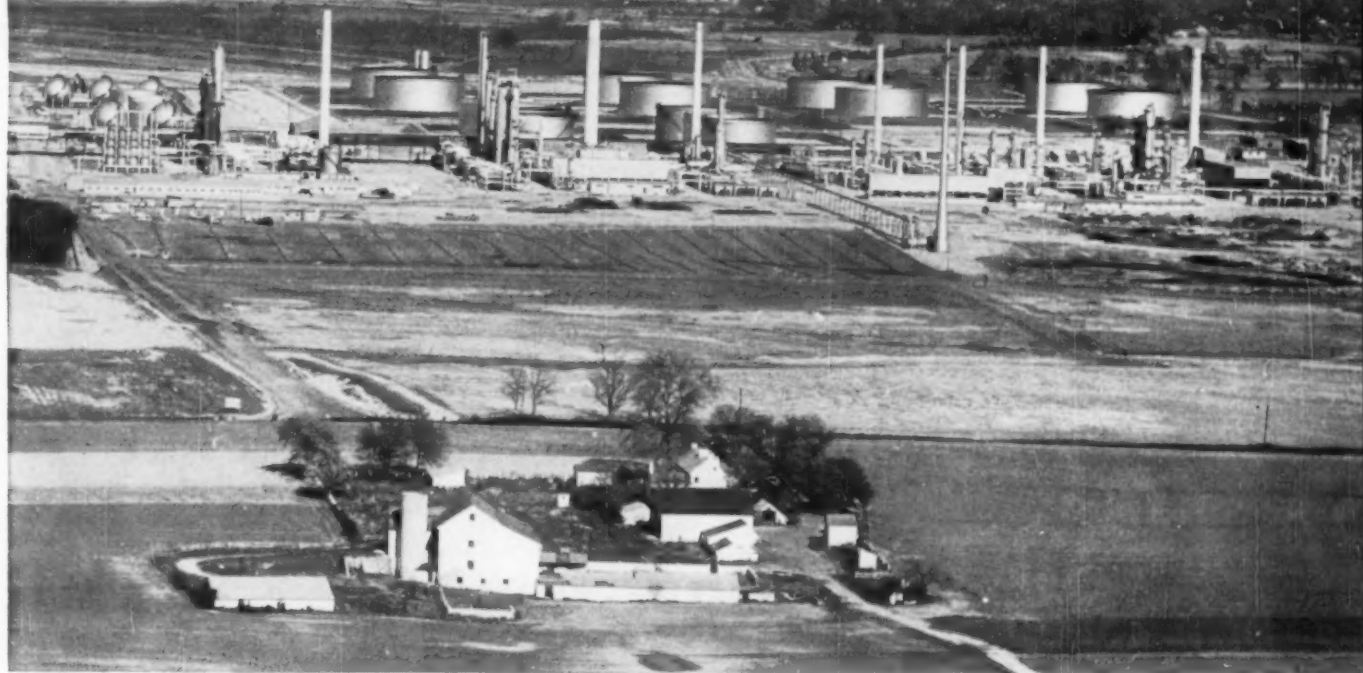
Oil company's new refinery (above) at Delaware City houses all of Tidewater's king-size processing units. Industry skeptics wonder if that's putting too many eggs in one basket.

TO MOST of the oil industry, the "hot-test thing in the business" is Tidewater Oil Co.'s new \$200-million refinery at Delaware City, Del.

To engineers and other technicians, it's a "hot" refinery because it's the largest ever built at one time (most giant refineries got that way by adding to original plant). Also, the Tidewater layout includes many individual processing units of advanced design and record size.

To marketing men, it represents one of the boldest moves made by any major oil company in recent years. Two years ago—when the Delaware plant was just in the blueprint stage—Tidewater shut down its only refinery on the Eastern Seaboard, a vitally important marketing area.

To management people and investors,



Gambles \$200-Million on Bigness

any step by Tidewater is "hot" news these days because the company is a key segment in the growing oil empire controlled by Jean Paul Getty.

• **Engineer's Dream**—On plans for the plant, Tidewater management turned loose its own engineers and those of C. F. Braun & Co., builder of the Delaware refinery. The engineers were told to shoot for the most modern, most efficient refinery they could dream up.

To oilmen, at least, the result is exciting. Six of the refinery's 11 major processing units are the largest ever built. One of these, which produces fluid coke as well as more valuable end products, was designed when the processes it employs had been tested only in a small pilot plant operation. The other five record-size units are for crude distillation, a fluid catalytic cracker, a catalytic reformer, a reformate extraction unit, and a unit to remove sulphur from oil.

• **Even the Stink**—Like most modern refineries, but probably more so, the new plant is designed to use everything in the 130,000 bbl. of crude oil it can process daily.

"The meat packers claim they package and sell everything but the squeal of the pig," a Tidewater spokesman jests. "Well, we are even packaging and selling the stink of oil."

By this, he refers to the sulphur recovery plant at Delaware City. Sulphur, when vented into the atmosphere by a refinery, is the worst offender from an odor standpoint. But Tidewater removes sulphur from oil in gaseous form, then converts the gas to pure sulphur in solid form.

• **Fuel for Power**—The fluid coker is another example of how the refinery squeezes the last valuable drop out of a raw product. Feed stock for this unit is the sludgy, low-end residue from crude distillation unit. The coker gets gasoline and other premium products out of this goo. The remnants are coke, which it can produce at a rate of 1,200 tons a day.

The coke, souped up with a little fuel oil, makes a fine fuel. So Delaware Power & Light Co., which operates a power plant on the refinery site, has designed the power plant to burn fluid coke.

What coke isn't needed for this

plant, Tidewater will market to others.

• **Eyes on Imports**—Oilmen in droves inspected the Delaware City refinery when it was formally dedicated late in May. Most of them admired the layout. But domestic oil producers who are opposed to increasing crude oil imports are less enthusiastic.

Some domestic producers see the new plant chiefly as an indication that Tidewater will turn more and more to imported crude. They point to the heavy investment at Delaware City in desulphurizing equipment. This equipment can handle up to 88,000 bbl. a day of crude that contains as much as 5% by weight of sulphur. This is more sulphur than better domestic crude contains. But it might well be needed to handle the oil that Getty Oil Co., a Tidewater affiliate, has been bringing in at Wafra on the Persian Gulf, or that Tidewater may find in Turkey, where it has exploration licenses.

Tidewater pooh-pooh's the extreme predictions that it is preparing to import all its crude. It points out that most of its crude now comes from Gulf of Mexico ports. Also, Delaware City was designed for extreme flexibility, and



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"... big tankers will haul Middle East and other imported crudes to the Delaware City refinery..."

STORY starts on p. 168

can refine crude produced anywhere in the world.

• **Big Tankers**—Even so, there are other signs of Tidewater's increasing interest in imports. The company has built nine new tankers since 1952. It has 16 more on order for delivery between now and 1963—and these will be whoppers, ranging in size from 46,500 tons to 68,000 tons.

There's no doubt that these big ships will haul Middle East and other imported crude to be refined at Delaware City. Most of the big refiners already are importing crude. What riles domestic producers is that up to now Tidewater has depended heavily on U.S. crude.

• **Port Facilities**—Delaware City is set up nicely to handle such tankers. It is located on deep water on the Delaware River. Its three piers can handle two 68,000-ton supertankers and one smaller T-2 tanker at the same time.

Also, there is vital maneuvering room for big ships. The water is deep enough at Delaware City to allow ships to turn in an area 1,500 ft. by three-quarters of a mile.

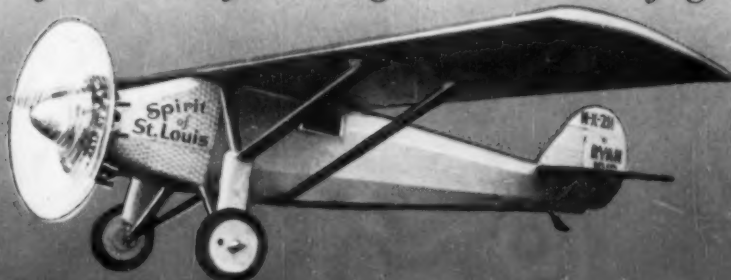
• **Quitting Bayonne**—Tidewater had operated its refinery at Bayonne, N. J., for 66 years when it closed down operations there early in 1955. There were three major reasons why the company decided to leave.

Company spokesmen are understandably reticent about two of these. It is common knowledge, however, that the Bayonne plant was plagued by high local taxes and bad labor relations. A veteran oilman guesses that Tidewater was paying at Bayonne four to nine times as much tax as competitors paid on comparable refineries in other locations. The same source insists that the Bayonne refinery employees had the worst reputation in the trade for sheer cussedness.

• **The Clincher**—Regardless of the merits of these claims, the most important consideration to the company's management must have been the rigidity of the Bayonne operation. Most of the equipment was old and inefficient. What was needed was a whole new plant. But, since Tidewater's sales were increasing at about the industry rate of 4% to 5% per year, it obviously needed a much larger plant to meet future demands.

The Bayonne site consisted of just 236 acres, and was surrounded by other industrial plants, so buying additional

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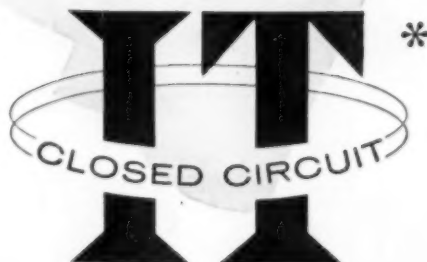
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land in the vicinity was out of the question. Tidewater made the hard decision to move.

• **The Shutdown**—Because the equipment was outmoded, the company decided to shut down the refinery.

"We simply could not meet competition at Bayonne," explains George F. Getty II, vice-president and general manager of Tidewater's Eastern division.

"We were set to run there only on premium crudes. We could not handle anything else. And you pay premium prices for premium crudes, of course."

Tidewater contracted with other oil companies to refine its crude to Tidewater specifications while it was building at Delaware City.

• **Shocked Competition**—The closing at Bayonne before earth had been moved at Delaware City astounded some of Tidewater's competitors. The company's big marketing area in the West is supported by a refinery, now being expanded, at Avon, in the San Francisco Bay area. Bayonne, with its 85,000-bbl.-per-day capacity, was the sole supplier for the Eastern division. New England, New York, and Pennsylvania accounted for the bulk of this division's sales, though it has recently been expanding toward the South.

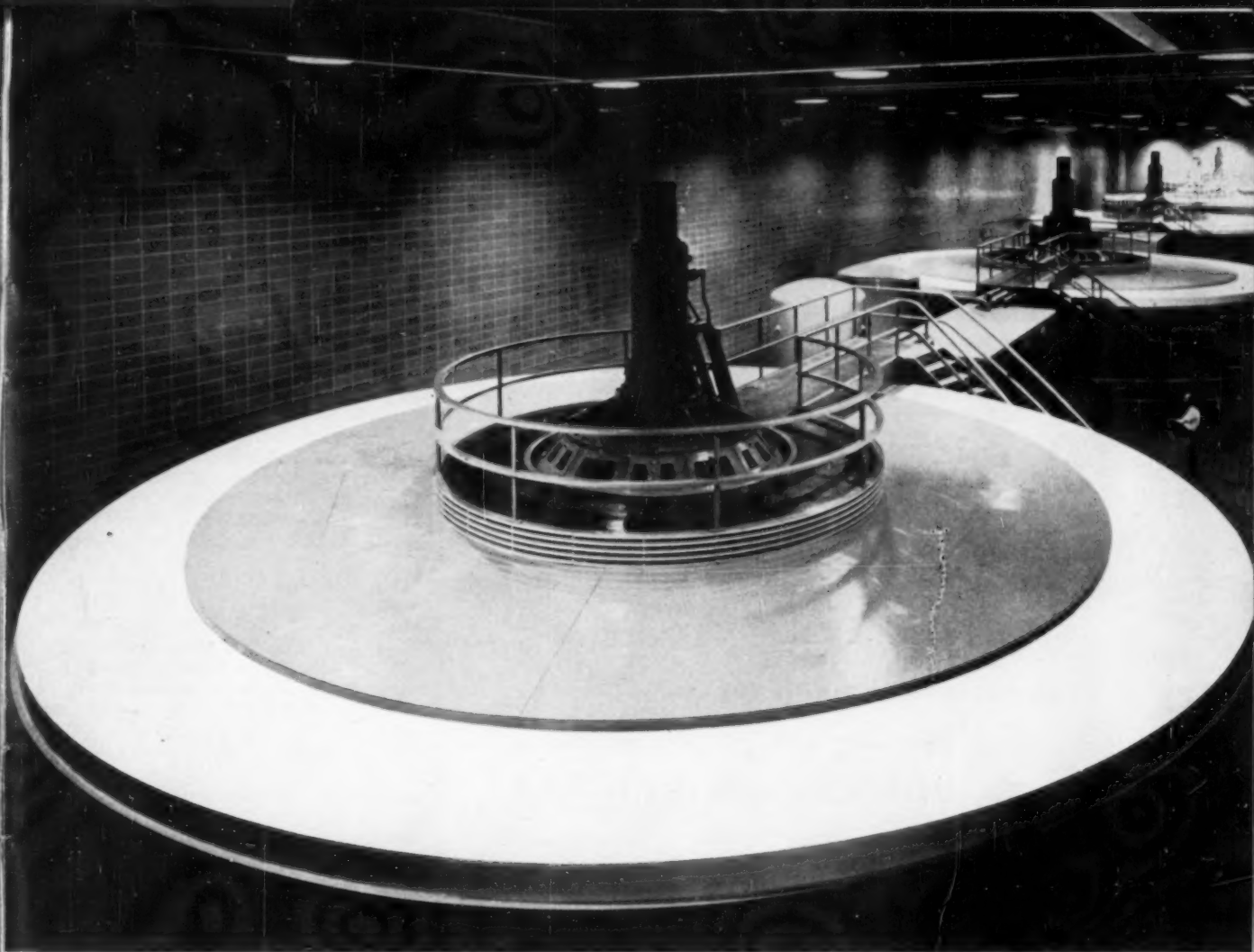
• **Net Gain**—Some outsiders predicted that the Bayonne closing would cripple Tidewater in the East, that customers would not buy gasoline, oil, and greases from anyone who had no refinery. But it didn't work out that way.

"Sure, we lost a few customers," Getty concedes. "But no more than we would lose by normal attrition. In this business, there is some switching of customers every day. But in 1956, our total sales actually increased, and substantially, over the previous year. In the first place, our customers knew that our lack of an Eastern refinery was only temporary. And they knew that our products were being refined to our specifications, so there was no change in the products."

• **Intensive Quest**—Meanwhile, company representatives were combing the East Coast for a refinery location. They looked at 30 sites between Virginia and Maine before choosing the 5,200-acre Delaware City tract.

"We were pretty particular about the site," says an engineer who took part in the search. "We had to be. We wanted to be on deep water, but we wanted solid ground. It can cost a fortune if you have to sink pilings to support a plant. And it is surprising how few industrial sites near deep water in the East have ground that can bear a heavy layout."

Delaware City also was near other transportation. A branch line of the Pennsylvania RR and high-speed highways are at hand. And just a few miles



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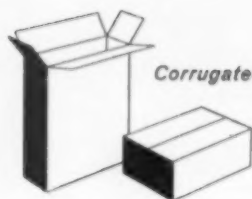
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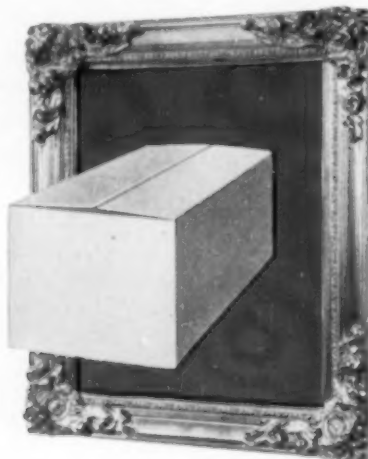
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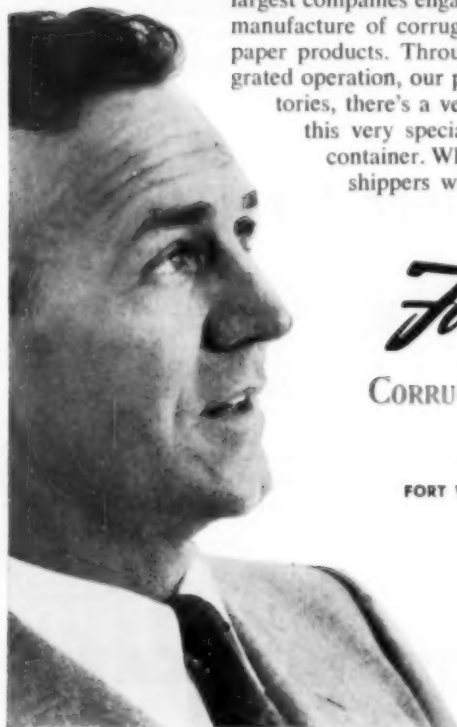
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north, a network of product pipelines fans out from Philadelphia to New York and western Pennsylvania.

• **Markets Near, Too**—Delaware City is hardly at the center of Tidewater's marketing area—Bayonne came closer to that. But it may be just that in the not-too-distant future. The company recently signed up a major distributor in Virginia and bought out another that operates in Delaware, Maryland, and Pennsylvania. George Getty concedes that an increasing portion of the company's budget for service station construction will be spent in the Middle Atlantic states.

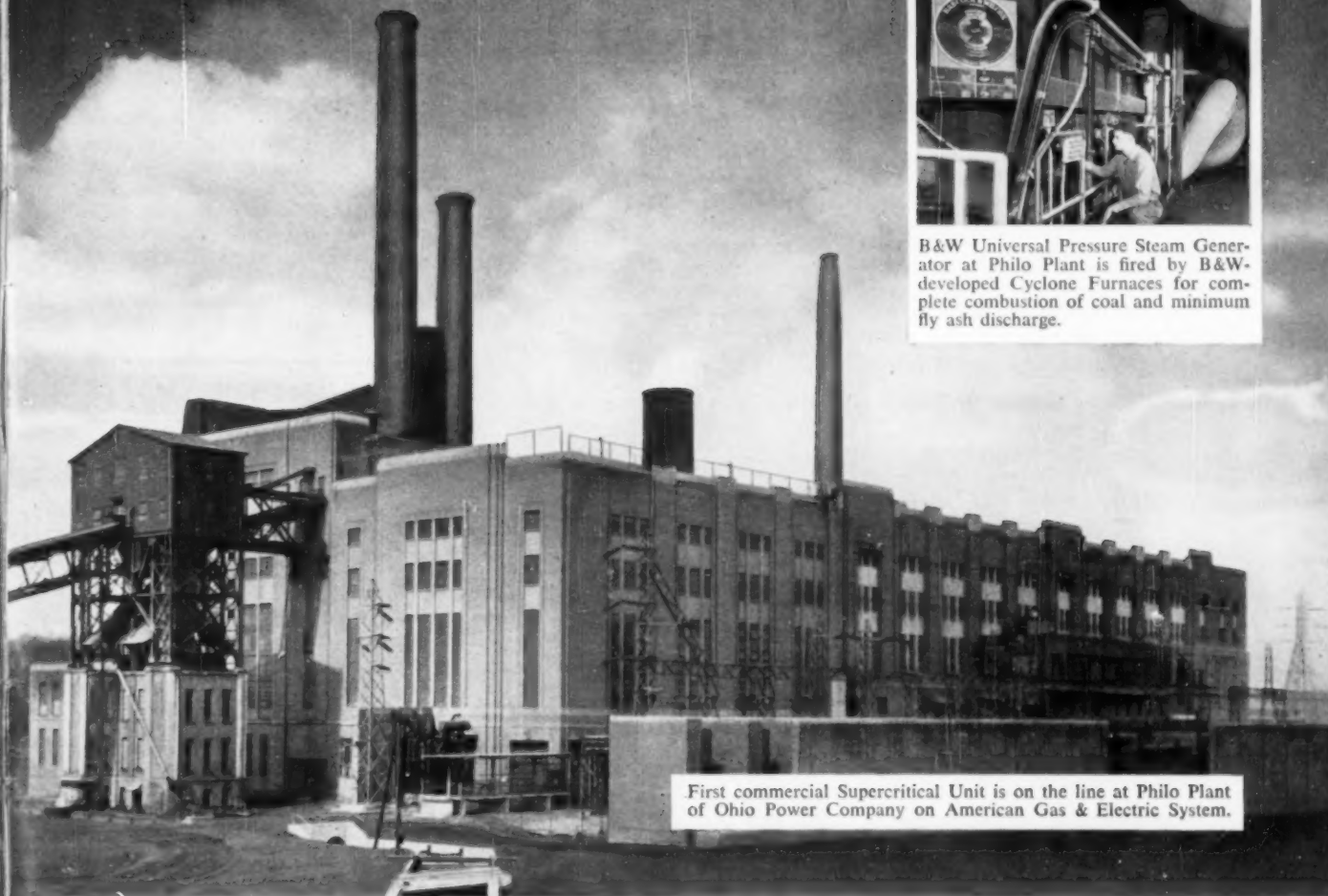
Some eyebrows were lifted in the trade when the Delaware City location was announced. Many strong competitors already have their big refineries on the Delaware in Philadelphia and environs. "Sure, there are a lot of refineries around Philadelphia," George Getty admits. "But there are a lot of automobile manufacturers in Detroit, too. And you don't hear them complaining about it. Actually, there are advantages in moving into an area where there are other refineries, though we were not specifically seeking such a location. You find the kind of skilled mechanics you need, the kind of tools and spare parts, the right kind of salesmen."

• **Contract Maintenance**—The location, for example, led Tidewater to another unusual feature of its new refinery. Catalytic Construction Co., a Philadelphia company, is handling all the maintenance for the plant.

Farming out this job relieves Tidewater of one of the most troublesome burdens in the refinery business. It means that the refinery needn't carry a big maintenance staff to handle emergency repairs and periodic preventive maintenance. At Bayonne, Tidewater needed a permanent staff of 2,200. At Delaware City, the staff runs around 500. Automation and improved equipment account for some of this differential, but the maintenance crew was the largest single force at Bayonne. Another saving to Tidewater is that Catalytic supplies all the tools its crews need—many of them expensive and used only occasionally.

• **Why So Big?**—Tidewater by now is accustomed to the question as to why it went after king-size processing units. Is it risking too much by having too many eggs in a single basket?

George Getty doesn't think so. "We believe Delaware City is the most efficient refinery we could build," he explains. "It is capable of supplying the finest products at the most economical costs. In this day of severe competition and high-octane ratings, you have to have a fine product. Furthermore, it is a highly flexible refinery. The major units are so designed that they can



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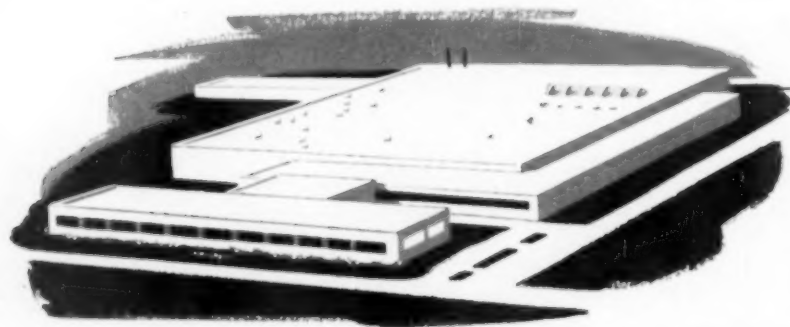
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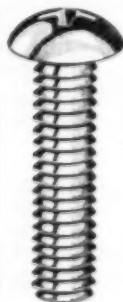
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A report prepared by Tidewater and Braun engineers puts it this way:

"Duplicate, smaller units would have required higher investment, duplicated operating and maintenance crews and other additional expenses. True, the single large units involved some additional costs to provide the necessary built-in reliability. While this reduced some of the expected savings, still the duplication-unit route would have substantially increased capital costs."

PRODUCTION BRIEFS

Chance Vought Aircraft has been awarded a \$35-million contract for continued work on developing a new carrier-based Navy fighter. The new plane is expected to top the performance of the company's F8U-1 Crusader, the Navy's first 1,000-mph.-plus seagoing fighter. The company has been working on the fighter since 1956.

Heavy demand for Teflon, one of du Pont's newer plastics, has forced the company to revise its expansion plans upward again. The tetrafluorethylene resin's chemical inertness, resistance to heat, and frictional properties are responsible for its popularity. Du Pont plans to increase by at least 30% production of the granular powders used in compression molding and extrusion processes, and the fine powders and aqueous dispersions used in making corrosion-resistant tubing and electrical wiring.

Mixed Quebec hardwoods, such as birch, aspen, and poplar, will be processed by the St. Malo Pulp & Paper Corp. and converted into a variety of papers and paper products in a \$3-million plant now under construction. The plant will be the first in Canada to use hardwoods instead of softwoods for paper making. Its design is based on studies of pilot plants already operating in the U.S. Initial capacity of the plant will be 100 tons a day.

Titanium price cuts are planned by Rem-Cru Titanium, Inc., and Mallory-Sharon Titanium Corp. whenever necessary to keep in the competition with Titanium Metals Corp. of America. Titanium Corp. recently announced a 10% cut in the price of its mill products. Price cutting has also spread to titanium sponge, with the du Pont Co. reducing its price 50¢ per lb., which means it is now selling for less than half (\$2.25) the 1948 price.

Keep hot sales leads HOT!



VERIFAX COPYING LETS YOU RUSH COPIES TO SALESMEN IN NEXT MAIL

Minutes after a sales inquiry (or other item) hits your desk you can have Verifax copies on their way to salesmen, regional managers, key men in your office. (Your secretary can make 5 of these photo-exact copies in 1 minute for just 2½¢ each.)

This short cut ends the delays that

lose so many sales. Does away with dictation, typing, transcription errors — gives salesmen a psychological boost. Leads look "more important" ... the whole story's there from letterhead to signature. Best of all the leads are "hot"—just watch sales jump!

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ONLY \$148 ... Kodak's new Verifax Signet Copier makes 5 copies in 1 minute for 2½¢ each ... gives you dry, ready-to-use copies, as accurate and long lasting as the original. It's a completely different copier.

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DOES MORE ... COSTS LESS ... MISSES NOTHING

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Gentlemen: Please send free copy of Don Herold's new booklet "How I Learned the Verifax of Life."

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CHETT HUNTLEY: "Paper communicates in two ways... to the eye... to the touch. It may speak with urgency or eloquence. But it is never without a voice."—*Mr. Huntley is a noted NBC news analyst and reporter.*

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NEW PRODUCTS



MONSANTO'S House of the Future gives Disneyland visitors a preview of the day when plastics will replace nails and wood.

Design for Living—in Plastic

THE FASCINATING ENIGMA of the future has American industry gazing into its crystal ball again. This time, the vision is the Monsanto House of the Future, which opens to the public this week in Disneyland, Anaheim, Calif. The pictures give some idea of what the designer-seers see for the future.

The idea for the house originated with Monsanto Chemical Co., which feels the days of hammer-and-nail house construction are numbered. To prove its point, Monsanto set out to design and build a house that will show off to best advantage what the company considers the construction material of the future—plastic.

• **Testing Ground for Plastics**—Monsanto made no attempt merely to sub-

THERMOPANE window glass by Libby-Owens-Ford has a scaled-in colored design.





DOORS OPEN QUICKLY AT YOUR FLOOR



TRAFFIC SENTINEL HOLDS DOORS OPEN AND MOTIONLESS



DOORS REMAIN WIDE OPEN TO LET WAITING PASSENGERS ENTER



DOORS CLOSE QUICKLY ONLY AFTER LAST PASSENGER ENTERS



WHEN YOU VISIT THE NETHERLAND HILTON HOTEL, where above photos were taken, see for yourself how automated Westinghouse Elevators add to guests' comfort and ease.

POLITE WESTINGHOUSE ELEVATOR DOORS **DON'T "SNAP" AT GUESTS**

Operatorless elevator doors never threaten you in The Netherland Hilton Hotel in Cincinnati. The doors stay open wide until you pass through the entrance; then they close quickly and safely behind you. That's because elevators in the hotel are by Westinghouse—equipped with magic Traffic Sentinel. The doors stay open *wide* until you're inside the car. No "snapping" threats of premature closing—*ever*.

For the hotel—and the management of hundreds of other outstanding buildings equipped with Westinghouse Elevators—this means quicker, safer, trouble-free service. Ask your nearest Westinghouse Elevator Representative for details.

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Westinghouse

J-98743A

WESTINGHOUSE ELEVATORS AND ELECTRIC STAIRWAYS

(Story starts on page 179)

stitute plastic for steel in such things as I-beams of plastic for wood. The idea was to get the most out of the strength, flexibility, and design features peculiar to plastics. Where plastics couldn't do the job best, traditional materials were used.

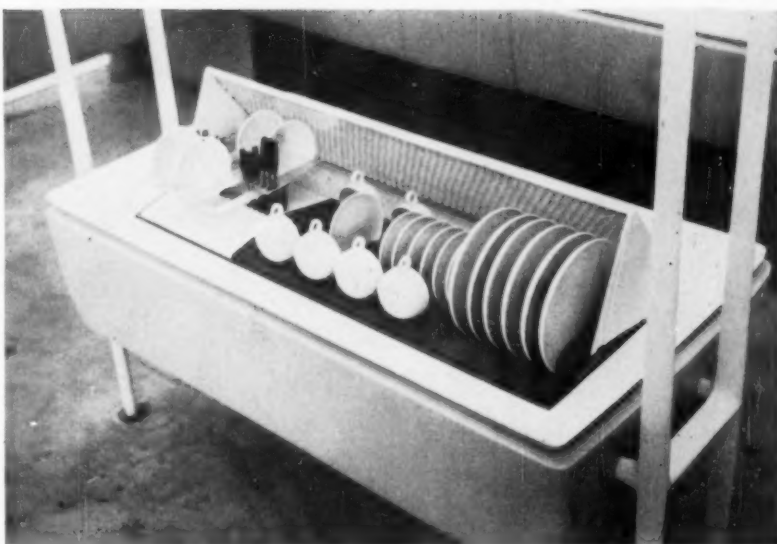
The results are a two-piece rounded all-plastic frame and cantilevered wings that come as finished pieces; molded one-piece plastic bathrooms; automatic plastic locks and door handles; Fiberglas walls; color TV telephones; and rooms filled with pleasant scents from the land and sea.

Monsanto could have built the entire home itself, but to get a broader, more imaginative range of thinking, it called in other companies to work out their specialties. The result was probably the largest group of individuals and companies ever assembled for this type of experimental project. The group included two partial subsidiaries, Mobay Chemical Co. and Chemstrand Corp., and 10 cooperating manufacturers—Crane Co., Bell Labs, Kelvinator Div. of American Motors Corp., Sylvania Electric Products, Inc., Owens-Corning Fiberglas Corp., U.S. Time Corp., Libbey-Owens-Ford Glass Co., Armstrong Cork Co., Yale & Towne Mfg. Co., and National Lead Co.

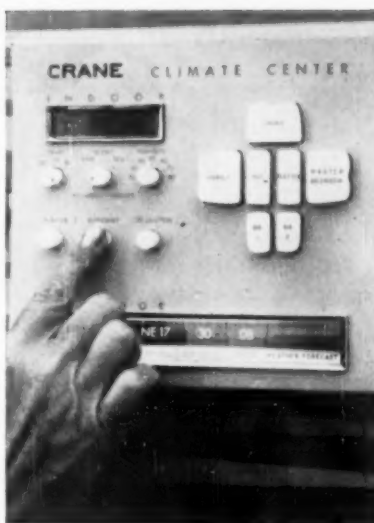
• **Mill's Choice**—Monsanto started the ball rolling in the spring of 1954 by going to the Massachusetts Institute of Technology Dept. of Architecture and asking, "What would you like to see in a plastic house of the future?" The house in the pictures was the answer. Monsanto decided to build, and ground was broken last February. Richard Hamilton and Marvin Goody, two of the MIT architects designed the present house. The interior was designed by the Victor Canzani group from Pratt Institute, Brooklyn, N. Y.

• **Foot in the Clouds**—The only part of the house that touches the ground is the 16-ft.-square center section. This is where the two bathrooms and kitchen are located. The section has a concrete foundation, which contains all plumbing, water heaters, and air-conditioning unit. The four wings that form the cross are cantilevered off this core, so that the house rests on a small plot of ground such as a leveled off section of hill. This is one of the uses for the house that Monsanto is pushing. The company's research in urban areas found a lot of residential land going to waste because of its hillsides.

Each cantilevered wing is made up of four preformed "modules" of Fiberglas-reinforced plastic. Each module is 8 ft. wide by 16 ft. long, with curved outer surfaces and a bent end. The two modules joined to form the floor of a wing have a flat inner surface, while

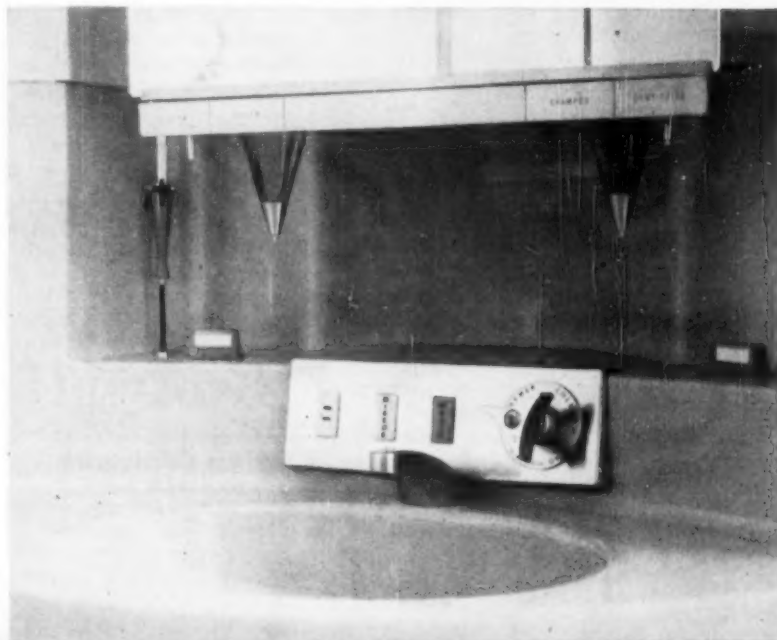


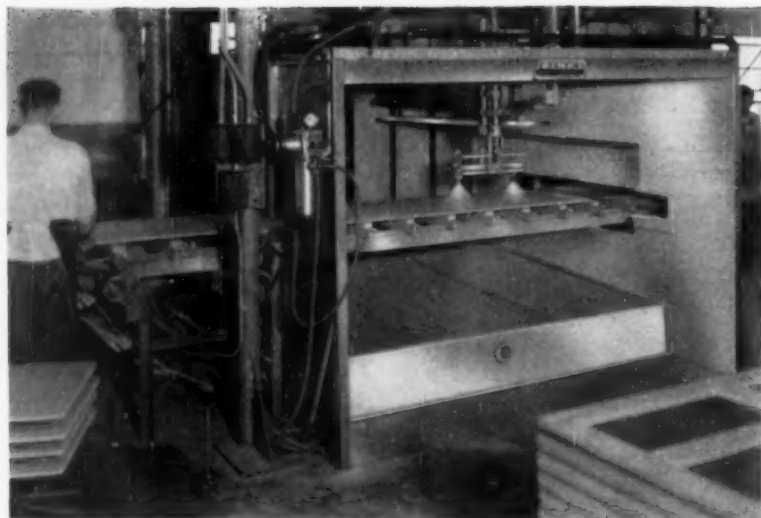
ULTRASONIC dishwasher—one of the features of Kelvinator's "Atoms for Living"—shakes the dirt off dishes with sound waves.



CLIMATE center by Crane Co. controls the air conditioning, scents the room, and gives a rundown of weather conditions.

BATHROOM in master bedroom has built-in shavers, shampoo and tissue dispensers, toothbrushes on retracting cords.





A Binks automatic reciprocating machine tirelessly and automatically sprays finishes on table tops.

At the Mitchell Mfg. Co. in Milwaukee.....

Binks automatic spraying machine solves problem of finish uniformity



"Because hardboard surfaces absorb finishes irregularly, we need a finishing method for our line of folding tables that insures precise application uniformity. Dipping or hand spraying didn't do it. Our Binks automatic reciprocating spraying machine does," reports Mr. Robert O. Blink, chief engineer for the Mitchell Manufacturing Company, Milwaukee, Wisconsin.

Steady production. This Binks automatic spraying machine now applies several coats of various synthetic finishes at the rate of fifteen running feet per minute. It can be stepped up to more than twice that rate when needed. Because application is automatic, the problem of operator fatigue is absent.

Operating and maintenance savings. Two Binks Model 7R spray guns automatically stop and start at the edge of the work being sprayed, reducing overspray to a minimum. Since installation in 1954 there has been no down-time for maintenance.

Adaptable to most products. If you have a production line, Binks automatic spray finishing or coating equipment can duplicate both its speed and quality control...regardless of product size or shape. Binks finishing engineers will be glad to show you how. There is no obligation. Just contact your nearest Binks Branch Office or write direct to the address below.

2106



SPRAY GUNS



AIR COMPRESSORS



NATIONWIDE SERVICE

Binks Manufacturing Company

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REPRESENTATIVES IN PRINCIPAL U.S. & CANADIAN CITIES • SEE YOUR CLASSIFIED



DIRECTORY

182 New Products



BELL telephone installation, which works by pushbutton, has a TV screen that shows who is at the other end of the line.

the upper modules that form the roof have a curved inner surface. The only straight lines in the house are the floors. All the electric wiring in the wings is in the lower modules, which are plugged into the center section like big electric light bulbs. If the house is positioned properly, almost every room should have daylight coming in the thermopane safety glass walls.

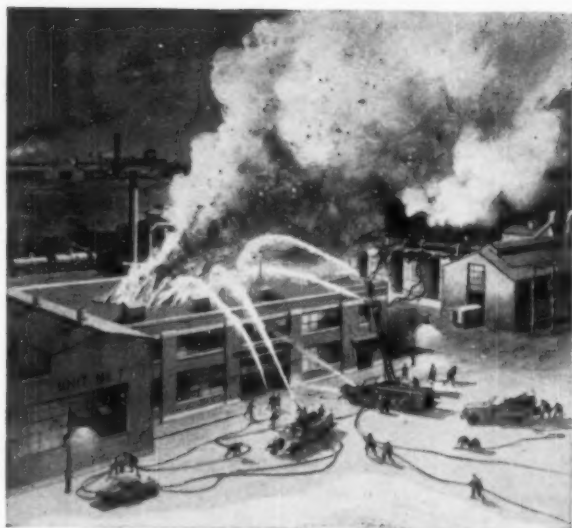
• **Inside the House**—Spectacular as the outside of the house is, it's the interior that undoubtedly will rouse the most attention. It has a children's wing with a girl's bedroom and a boy's bedroom, a master bedroom wing, a living room wing, a family or dining room wing, while the center section contains the bathrooms and kitchen.

The girl's bedroom is a play for the teenager's heart. She can study by the light of a cylindrical floor lamp. A dial dims this light if she wants to listen to her record player. There's an Acrilan rug with a urethane foam underlay over a vinyl floor with foam underlay, a comfortable spot for long talks on her small, lightweight, oval-shaped telephone with illuminated dial—which is within easy reach on the suspended vanity. The bed, mattress, and pillows are of plastic products.

The boy's bedroom is separated from sister's room by vinyl panels. His room is designed for the young man of three to five years. He can sit in a plastic chair at his plastic desk to play checkers—which apparently will survive into the era of plastics. The light will come from a floor fixture that projects light on to a clam-shaped reflector overhead. A speaker and transmitter mounted in the wall permits mother to keep tabs on him from any room in the house.

• **Bedroom Built for Two**—The master

BUSINESS WEEK • June 15, 1957



File #H-48-9460. Company power plant knocked out by fire. Business Interruption Insurance paid \$253,000 during ensuing 3-month shutdown.



File #DOA-9-15665. Fire of unknown origin. Firm shut down 9 weeks. Continuing expenses and anticipated normal profit paid by Business Interruption Insurance.

3 firms shut down ...yet all made their regular profits

(Actual cases from Hartford files)



File #TC-SI-1087. Windstorm toppled chimney. Fire followed. Company 6 months getting back to normal. Business Interruption Insurance paid \$446,183.

Not only profits, but the very life of a business may be at stake when unexpected disaster hits.

For earnings often stop completely. Or fall off drastically.

Still, expenses have to be paid. Whether you're doing business, or whether you're not, there's rent... and the interest on indebtedness... federal, state and local taxes... salaries of employees. The squeeze is on from every direction.

Here's where Business Interruption Insurance in adequate amount eases the pressure. It steps in and helps to pay your continuing expenses when fire, windstorm, explosion, riot or other insured hazard temporarily

shuts down your office or factory.

And that's not all. Business Interruption Insurance can also pay you the profit your business would have earned except for the disaster.

No business, small or large, can afford to be without Business Interruption Insurance. And it costs sur-

prisingly little. *Less per \$100 of protection than property insurance!*

Call your Hartford Fire Insurance Company Group Agent or your insurance broker for full details about this important, low-cost form of "earnings protection"—Hartford Business Interruption Insurance.

Year in and year out
you'll do well with the

Hartford
Fire Insurance Company
Group



Hartford Fire Insurance Company
Hartford Accident and Indemnity Company
Hartford Live Stock Insurance Company
Citizens Insurance Company of New Jersey
Hartford 15, Connecticut
New York Underwriters Insurance Company
New York 38, New York
Northwestern Fire and Marine
Insurance Company
Twin City Fire Insurance Company
Minneapolis 2, Minnesota

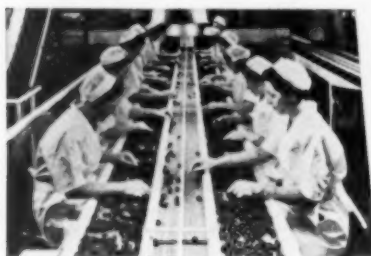
...you'll find Thermoid Rubber and Friction Products used everywhere

ON THE FARM



Thermoid Band Seeders increase crop yield, lower fertilizer cost through advanced impregnation methods.

IN PROCESSING



Thermoid Conveyor Belting, designed for long, trouble-free service, helps speed products and packages on their way.

In the food industry, and in practically any industry you can name, Thermoid Products are on the job—delivering even more than is expected of them. Quality materials and versatile engineering, plus multi-plant facilities and personalized service—all are yours when you specify Thermoid.

IN THE DAIRY



Thermoid Hose of many types, engineered for specific applications, stays on job longer—cuts replacement costs.

ON DELIVERIES



Fan Belts, Hose, Brake Linings and Clutch Facings help promote safer operations, lower fleet maintenance costs.



Thermoid Company • Trenton, N. J.

bedroom has an oversized double bed with vinyl foam mattress and pillows, an Acrilan cover, and a large translucent headboard. Behind this facade are two banks of fluorescent lights divided at the middle of the bed. The two banks are on separate dimmers, which can be adjusted to give enough light without causing a glare.

The phone on the plastic night table resembles a jewel case. It has a list of frequently called places on a card. To call any of these numbers, all you have to do is set a marker next to the name and push a button. If the number you want isn't on the card, you push other buttons, instead of dialing. Conversation is carried on without a receiver.

The vanity area, in a corner of the master bedroom, has a vanity table with a built-in sink. The table has sliding doors of colored safety glass and a melamine plastic laminate counter. A set of controls enables the lady to simulate the time of day and lighting in which she will be seen.

• **Light Up the Food**—The family room occupies one wing, and might be called a dining room by the present-day family. The entrance from the center section has a screen of colored safety glass. Behind this is a coffee table and cabinets made of plastic. The dining room table has a lazy susan swivel top, and the plastic benches are upholstered in white vinyl. Over the table, an hour glass-shaped lighting fixture throws light on the ceiling and table. The bulb that lights the table works independently from the one that lights the ceiling, and both are controlled by dimmers. The idea is that when the food is on the table, the table light can be turned up to accentuate the food—a refinement that will be cheered by men who have long rebelled at the candle-lit board.

A wall-mounted color television telephone with a built-in speaker and transmitter frames a portrait of a butcher holding a cut of meat.

• **A Fireplace, Even**—The living room occupies the fourth wing of the house. Like the others, all the floor covering, furniture, and upholstery are plastic. As a concession to diehards, this room has a fireplace. A painting on an acrylic panel hangs from the ceiling by a nylon thread. But the sculpture is of bronze.

Overhead there's lighting fixture without a bulb. It looks like a mobile, and gets its light from a light projector shining up at it from an inconspicuous spot on the floor. The fixture can be moved to any one of the small hooks mounted around the curved ceiling. The phone is a push dial, non-receiver job, and there is a second speaker on the opposite wall. When a switch is thrown, anyone in the room can hear the person at the other end of the line.

• **Bathroom Luxury**—The two bath-



The sharper your
bookkeeper's pencil,



the wiser your decision to buy

FRIGIDAIRE

low-cost

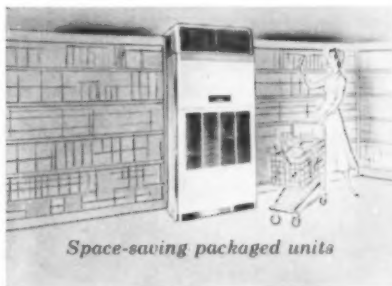
CUSTOM COOLING

Watch costs closely? Nothing beats the flexibility of Frigidaire low cost *Custom Cooling*. It assures proper cooling for the load—no more, no less than you need. Compact, packaged units occupy minimum space—even may be suspended from the ceiling if desired. They're easily installed, without disturbing your business, for a prompt and profitable return on your investment.

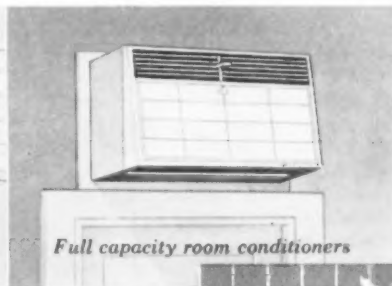
Custom Cooling means simply this: from the new 1957 line of Frigidaire air cooled and water

cooled self-contained or remote systems, your Frigidaire dealer can select just the right type and capacity... at the right price. You'll have proof of performance a-plenty, in employee efficiency, customer comfort and on the P. & L. statement where it counts!

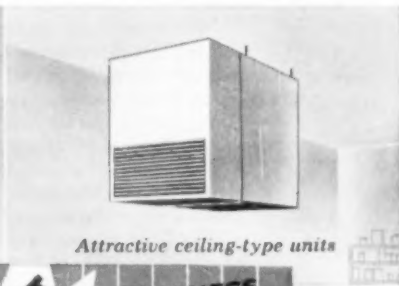
Call your Frigidaire Air Conditioning Dealer for a free survey of your needs. Look for his name in the Yellow Pages of your telephone book. Or write FRIGIDAIRE DIVISION, General Motors Corporation, Dayton 1, Ohio.



Space-saving packaged units



Full capacity room conditioners



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BRADLEY CONTAINER CORPORATION

A SUBSIDIARY OF AMERICAN CAN COMPANY

Maynard, Mass. — New York, Chicago, Los Angeles, Toronto

rooms are located back to back in the center section of the house. The bottom half of both bathrooms, including the bottom of the shower, tub, and lavatories, are molded in one plastic piece. Similarly, the top half is one piece. All that has to be done to build two separate bathrooms is to fit the top piece on the bottom.

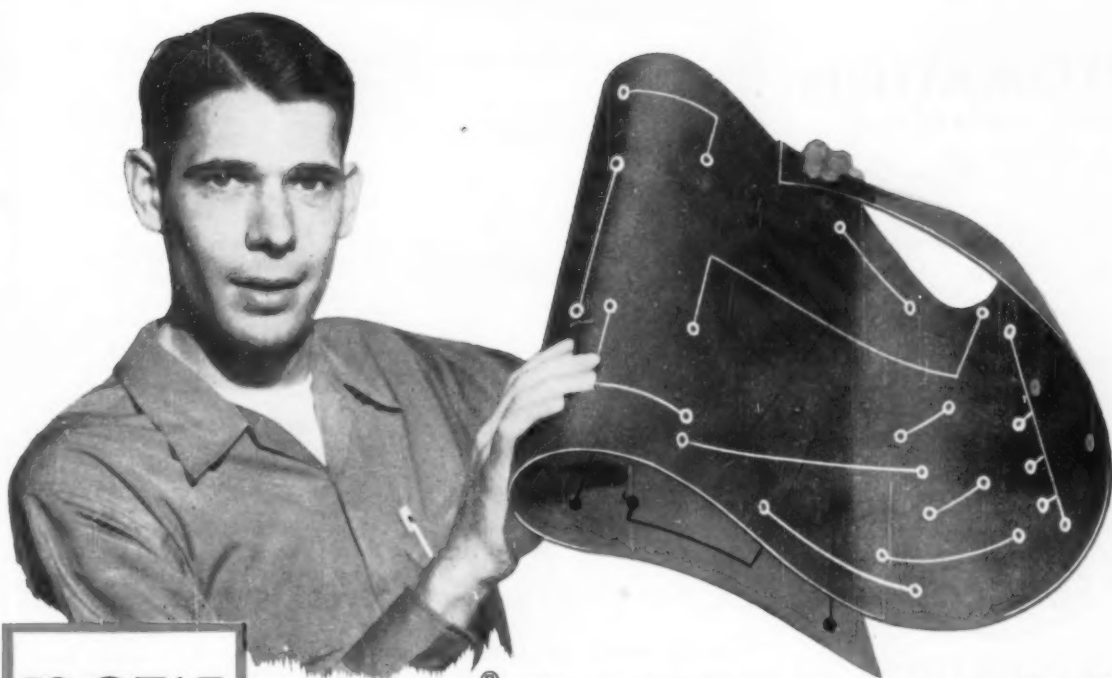
The children's bathroom has a sink that moves up and down, to accommodate the grimy paws of very small fry. The ceilings and the shower have built-in translucent domes with the lighting behind them. Dimmers make the lights bright enough for shaving, or dim enough for a night light. The cabinets have built-in plastic toothbrushes on retracting cords. The telephone has a built-in, one-way television screen so that the front door can be watched.

• **Ultrasonic Dishwasher**—The kitchen is loaded with projections into the near and distant future. A button-controlled refrigerator drops from the ceiling, opening separate chambers for preserving irradiated and regular food. A microwave stove pops up from knee level to cook roast beef and apple pie in the same oven in a matter of minutes. The entire ceiling is lighted behind a plastic diffusing material that gives stronger light without glare.

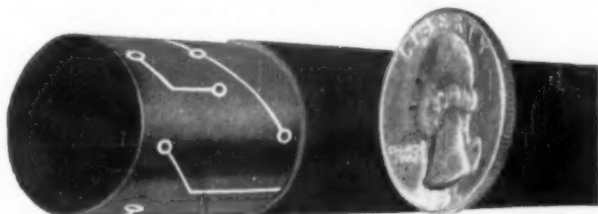
In the center of the floor there's an ultrasonic dishwasher that shakes the dirt off the dishes with sound waves. On the wall, the ubiquitous push-button phone with card selector can be set to talk or listen to anyone in any other part of the house. A button near the set opens the front door's plastic lock.

• **Push-Button Weather**—A climate control panel—not hooked up in the preview model—is built into the kitchen wall. This panel does even more than the weather girls on TV do today. A strip along the bottom of the panel gives the outdoor temperature, humidity, wind velocity, barometric pressure, precipitation, and weather forecast. A panel at the top gives the indoor temperature. Buttons control each room's temperature and humidity. And there's a selector button that controls fragrances such as pine, ocean, flower, and perhaps one for unwelcome guests.

• **Here to Stay**—Some of these products are much closer than others. The fabrics, clocks, door fixtures, upholstery, and paints are on the market now, or soon will be. The lighting with dimmers can be done now. The stove is on the market, but the dishwasher is a ways off. There's nothing new about safety glass, but the use of fiberglass along with plastic in the module sections is an attempt to find out what stresses and strains it will take. And the variety of phones used can be massed produced—but they will be hard to integrate into our present system. **END**



new Formica® flexible copper clad...



fits larger circuits...into smaller spaces

The remarkable new Formica flexible copper clad laminated plastics save space like never before. Notice how a 40 square inch flat circuit above is contained in a space only 10 cubic inches!

Works fine, too. There's no shorting because of the insula-

tion the flexible sheet provides.

Flexible copper clad offers the product designer circuits in new shapes . . . plus increased miniaturization. For example, as shown above, an .008" sheet can be confined in a 3/4" diameter tube.

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the design improvement possibilities Formica flexible copper clad holds for your products—civilian or military—write for new FF 89 data sheet. Formica Corporation, subsidiary of American Cyanamid, 4505-7 Spring Grove Ave., Cincinnati 32, Ohio.

FI 1417



**high IR,
cold punching
copper clad**

XXXP-36 for finest printed circuitry. Offers 1,000,000 megohms insulation resistance, cold punches to and including 1/16". It's the original translucent, watermarked sheet so widely copied but never duplicated.



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glass epoxy
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FF 91-1—retains mechanical strength and insulating properties at high temperatures and humidity. Cold punching and chemical resistant. Ideal for rockets and missiles.

Save your engineers — use Formica-4
the complete laminated plastics service



1. Application engineering
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AUTOMATION

within reach at last!



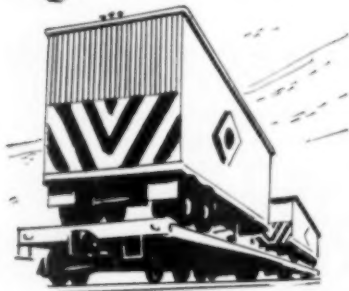
Baker fully automatic plastic presses are instantly adjustable for different jobs. That's why complete automation of plastic molding is possible . . . even on short or medium runs. Write Dept. BW-657.



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ERIE PIGGY-BACK

combines the best of rail and highway for dependable, all-weather, door-to-door service. Another progressive railroad service pioneered by the Erie to better serve business and industry!

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DEPENDABLE SERVICE FOR THE
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E&MJ QUOTATIONS

Daily Prices of Metals

	ELECTROLYTIC COPPER		LEAD		ZINC (b)		ALUMINUM		TIN
	Domestic Refinery	Export Refinery	New York	St. Louis	Delivered (a)	East St. Louis	Primary Pig 99%	Secondary	
May	31.275	29.275	15.000	14.800	12.000	11.500	25.000	25.000	98.125
24	30.550	28.550	15.000	14.800	12.000	11.500	25.000	25.000	98.250
25	30.550	28.550	15.000	14.800	12.000	11.500	25.000	25.000	98.250
26	31.250	29.250	15.000	14.800	12.000	11.500	25.000	25.000	98.250
27	31.250	29.250	15.000	14.800	12.000	11.500	25.000	25.000	98.250
28	31.250	29.250	15.000	14.800	12.000	11.500	25.000	25.000	98.250
29	31.250	29.250	15.000	14.800	12.000	11.500	25.000	25.000	98.250
Average	31.250	29.250	15.000	14.800	12.000	11.500	25.000	25.000	98.250
Calendar Wk. Avg.	31.250	29.250	15.000	14.800	12.000	11.500	25.000	25.000	98.250
May 20-25	31.250	29.250	15.000	14.800	12.000	11.500	25.000	25.000	98.250

Work-Flow Drafting Desks

(SEE CATALOG PAGES 16-17)

Model	Description	Top Size	Shipping Weight	Suggested Retail (Plus Freight)
HL-4800	Linenum top	48" x 36"	340	\$216.50
HL-6400	Linenum top	64" x 36"	350	282.50
HL-6600	Linenum top	66" x 36"	350	310.50
HL-7200	Linenum top	72" x 36"	370	321.00
HW-4800	Wood top	48" x 36"	340	249.00
HW-6400	Wood top	64" x 36"	350	264.50
HW-6600	Wood top	66" x 36"	350	280.50
HW-7200	Wood top	72" x 36"	370	285.50

Balance Sheet available in full

Accessories

(SEE CATALOG PAGES 20-21)

Model	Description	Standard Packing	Shipping Weight	Suggested Retail (Plus Freight)
1-1000	Square Steel Wavy Baskets	4 of Color to Carton	54	ea. \$ 3.95
		4 of Color to Carton	22	ea. 5.95

A Pricing System

Classic economic theories held that prices that were free to adjust themselves would keep an economy in balance.

Today, government pressures and businessmen's own long-range strategies upset this equilibrium. The result may be a "ratchet" pricing system that can only go upward.

FEW THINGS look more prosaic or more narrowly technical than a mass of price quotations such as those pictured above. But the concept of price is—like the wheel and the alphabet—one of the miraculous creations of the human imagination that have made possible an increasingly complex society.

When economists like Adam Smith first grasped the exact working of the price system, they were so stunned that they could only attribute it to the hand of God. Nothing else, Smith thought, could explain the marvelous way in which an uncontrolled price system could direct men to the best use of nature's resources, could distribute goods and services so wisely, and could so surely establish social harmony, stability, and progress.

As economics outgrew its origins in moral philosophy and theology and came to pattern itself more on the physical sciences, the hand of God received less mention in discussion of the price system. But Smith's basic principle remained—that freely adjusting prices will hold an economy in continuous balance.

• **No Longer Free**—When Smith was writing, the industrial revolution was just getting started. Now, nearly 200 years of technological change have transformed the world cutting the ground from under two basic assump-

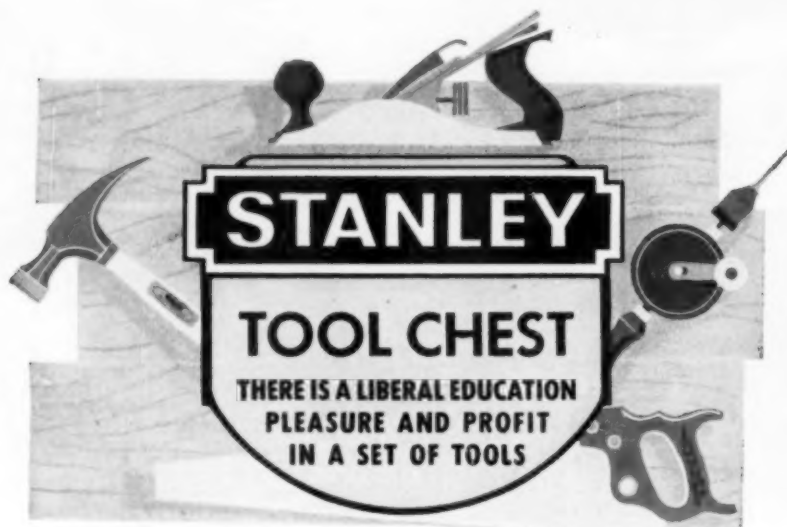
tions of Smith's old price theory: (1) that a multitude of small businesses are competing freely and (2) people and resources are free to move into new lines of business, wherever higher prices and higher profits may lead them.

By now, industrial technology has created not only big business (50 corporations account for nearly \$100-billion in sales) but also big labor (18-million union members) and big government (spending more than \$70-billion a year).

Moreover, the U.S. economy has moved into what might be called (as it was in the Middle Ages) a "just" price system—in which companies declare that all they want is a "fair" or "reasonable" margin over their costs, and the government stands by to see that that's all they get. These companies today are the big pace-setters.

In such an economy, it is obvious that prices are controlled by corporate managers, union leaders, and government officials, rather than by a divinely guided balance among myriad tiny forces.

• **Still Unbalanced**—Some economists have hoped that the interaction (or "countervailing" power) of these great price-determining forces would somehow produce a giant edition of the old self-balancing price system created by smaller forces. But this doesn't seem to have happened. Instead, the new sys-



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viewed corporate executives in a dozen industries.

• **Complications**—Viewed at close range, price-setting by individual businesses takes on a complexity beyond that of the most intricate mathematical-economic models dreamed up in the learned journals. According to theoretical analysis, prices are set either to gain the most profit possible or, in the case of price-cutting, to eliminate the competition.

In practice, these principles are swayed by a new complication—businessmen must make price decisions with one eye on the policemen—the Federal Trade Commission and the Anti-Trust Div. of the Justice Dept.

BUSINESS WEEK reporters found that this consideration is anything but vague or remote in the thinking at headquarters of many great industries. It scarcely could be, in the light of such key post-war cases as the cement case (which outlawed the basing-point system), the A&P case, or the tobacco case.

Of these three cases, Prof. Kenneth E. Boulding of the University of Michigan once said: "Mr. Bumble's ass certainly seems to have developed a remarkable ability to ride off in several directions at once. The A&P is condemned for being too competitive; the tobacco and cement companies are condemned for not being competitive enough.

The A&P is accused of discrimination because certain economies of integration are passed on to the consumer; the cement companies are accused of discrimination because certain economies in transportation are not passed on to the consumer."

• **One Eye on Washington**—Logical or illogical, the evolution of government police power over business pricing, plus other forces, has resulted in a fundamental change in the rules of the game. So marked is this shift that big steel companies, for example, hesitate to announce a price increase without some specific cost increase, particularly in wages, to justify it.

The biggest company, U. S. Steel—the most conspicuous and liable to feel the policeman's club—hesitates to go too far, even with a wage hike as evidence of necessity. As last year's experience showed, the smaller steel companies pressed the Corporation hard to go even further (BW—Aug. 11 '56, p. 24).

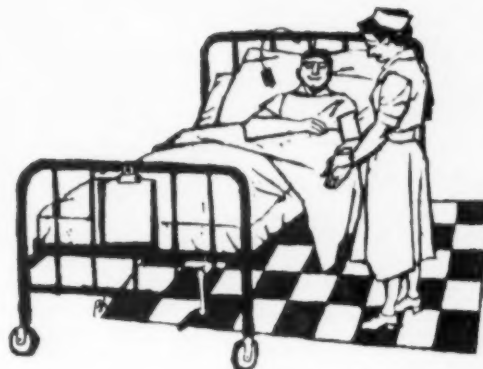
Here the restraining hand of government—not in the form of direct action but in behind-the-scenes pressure—prevailed, in a situation where a booming demand for steel could easily have sanctioned a far stiffer price increase. A serious question for further study is whether price increases short of what the market situation would otherwise permit may not themselves produce a dragging-out of the price-raising period,

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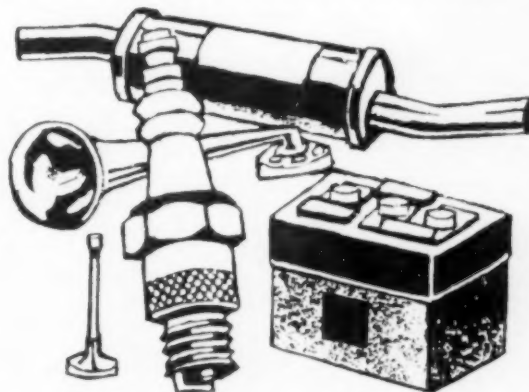


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"... in some markets, Esso plays the role of price leader; in others, another company may lead ..."

STORY starts on p. 188

thus underlie the phenomenon known as "creeping inflation."

• **The Long View**—Yet, as a close-up look at pricing decisions by many companies in diverse markets brings out, it would be oversimplifying to suggest that, in the absence of the policeman, big corporations that are in a position to make short-term killings would necessarily take advantage of this opportunity.

For, in addition to being concerned over possible federal prosecution, companies are sensitive to the longer-run effects of their prices on their relations with their dealers, distributors, or ultimate customers. To take the fullest possible advantage of a short-term market opportunity might well be to wreck those relations—or destroy a distribution system.

So diverse, indeed, are the marketing and competitive or monopolistic situations that apply across the range of American industries, and so various are company strategies and techniques in price-setting, that it is extremely difficult to make any valid generalization about the nature of the new American price system and how it works in specific instances.

This can be shown by the kind of picture **BUSINESS WEEK** got by talking to executives in different industries.

III. The Oil Industry

At Esso Standard Oil Co., a wholly owned subsidiary of Standard Oil Co. (N.J.), two officials, both deeply involved in price problems, disagreed sharply with each other over the notion that Esso followed a "just price" (or what some might call a cost-plus) price philosophy.

George T. Piercy, general manager of supply and transportation, holds that the phrase "just price" exactly characterized the company's policy. He cited as evidence the "hold the line" price policy of 1946 and 1947, when the oil companies could have put prices up much higher, while demand was soaring and distribution facilities were not available to meet it.

But Robert P. Ferguson, manager of Esso's economic and marketing research division, holds that competition for gasoline customers is so hot that it is nonsense to suppose that Esso is following or could follow a "just price" approach. Indeed, Ferguson suggests, the 1946-47 hold-the-line policy was a mistake. If the oil industry had boosted its prices higher then, he thinks, it would have brought more resources

into quick use, and this would have been better for everyone.

• **Isolating Costs**—Ferguson and Piercy agree that there is, in any case, no simple or direct way of applying a cost-plus principle to setting petroleum product prices. The reason: "We are not able to determine the cost of any single petroleum product."

Nevertheless, says Ferguson, some procedure must be followed to calculate and recover the costs of given products. Here's how Esso goes about determining one key price—the tank wagon price of gasoline, the price that's charged to dealers:

Esso takes its best estimate of the going market price for cargo lots of gasoline at the U.S. Gulf Coast. (This area, with the greatest accumulation of refinery capacity and lowest over-all cost of operation, is the primary wholesale market for major petroleum products.) To this wholesale market price, Esso adds (1) tanker freight from the Gulf to each of its terminals, (2) terminal costs and an amount to cover evaporation and in-transit losses, and (3) transportation costs to bulk plants and any secondary terminal expenses.

Then Esso adds an item to cover total marketing expense, plus a profit item that it tries to measure as a return on the company's investment in gasoline marketing facilities. The sum of these items is Esso's "target price."

• **Competition**—But this target price must next be related to the local market surrounding every bulk plant. In some markets, Esso plays the role of price leader; in others, another company may lead. And sometimes, of course, Esso can find itself in the midst of a chaotic price war.

Esso marketers stress that it's tough to price gasoline with any assurance that customers won't leave in droves if your prices get much out of line with those of competitors—because gasoline is a pretty standard product and no shopper is so mobile as the man in a car.

IV. Electrical Appliances

At General Electric's Appliance Park in Louisville, three executives differ over whether or not prices were set with an eye on the Justice Dept.

T. D. Eberhardt, marketing manager for the room air-conditioner department, and Robert Day, manager of utility relations, give no weight to the supposition that GE might not engage in a price-cutting war because of fear of antitrust action. They hold



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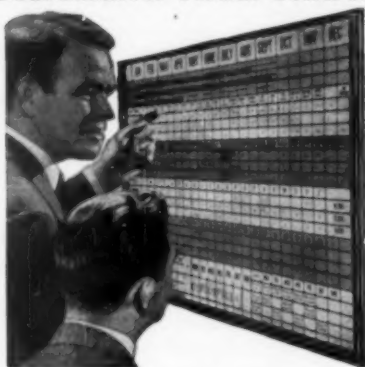
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that it is GE's marketing policies, with stress on "quality," that preclude price-cutting action.

But James J. Slattery, marketing manager for the household refrigeration department, maintains that anti-trust action is a possibility that must always be taken into account in making marketing decisions. Slattery feels that using "price as a weapon to gain an inordinate share of the market" would involve a volume of advertising that might cause the consuming public to grow weary of hearing about GE products and hence to react negatively.

• **Price Philosophy**—GE's aim, Slattery says, is to "maintain its market position"—and prices are made with this in mind, rather than the goal of getting the maximum short-run profit. Other price objectives, the GE men agree, are "keeping an association between GE and quality" and "maintaining mutually beneficial relations with employees, distributors, and retailers."

Some of this seems a bit too high-flown to Robert Dav. "Stripped of all theoreticals," says he, "pricing is a water-testing process. You put your toe in and, if it isn't too cold, the whole foot goes."

V. Electrical Equipment

At Westinghouse in Pittsburgh, the basic price philosophy is described as cost-plus. Managers of profit centers are expected to produce pre-tax earnings that amount to 20% on the assets they command.

Westinghouse says it has never priced on the basis of what the market will bear—and its people can't imagine that the company will ever do so. Officials say that, after a price lag behind rising costs in the earlier postwar years, profit margins on heavy apparatus have been restored. They predict that there will be no further price increase other than that dictated by increases in labor or material costs.

VI. Meat Packing

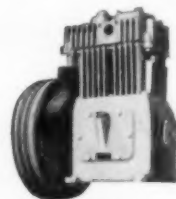
The meat industry's price policy is an instance of the cost-plus principle in reverse. Meat outfits selling a perishable product on a fast market, have two sets of prices to worry about—(1) what the consumer will pay and (2) what the industry must pay for the livestock that is its raw material. The first pretty much determines the second: Packers have to keep an eye on what their product will bring, watch expenses, and buy livestock accordingly.

The meat industry works on very thin margin—and is very unhappy about its profit picture.

Packers feel that the housewife's opportunity to reject the product is so wide that she really calls the shots on



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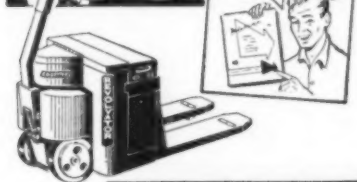
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prices. Some packers feel there's too much competition on price, too little on quality and service.

Perishability is a big factor that plagues the meat industry's prices. Meat can't be held indefinitely—only a relatively small amount can be frozen—and oversupply may mean sale at a loss. "The feeling," says one packer, "always is that the first loss is the best loss." This breeds a highly unstable price situation in meat.

VII. Plywood

This is another industry with highly unstable prices—but without the excuse of perishability. Plywood is a product of uniform grade, produced by many small and a few big manufacturers. Only the largest companies—Simpson, U. S. Plywood, Georgia-Pacific, and Weyerhaeuser—have their own distribution yards. And all these yards together won't hold more than one-fourth to one-third of the industry's production.

• **Panicky Business**—Plywood is expensive for a mill-owner to hold. When demand slumps, a mill begins to fill up with unsold inventory. If the mill owner doesn't get some orders fast, he'll have to shut down—and that's expensive.

So the mill owner grabs his phone to drum up business. He usually starts by offering an extra 5% discount for the jobber. But word of this gets back fast to the broker of a competing producer. Pretty soon everybody is on "two fives"—the normal 5% discount plus the extra 5%. Next, someone will break the price line—and the buyers will really hold off, waiting for the bottom.

Before the bottom is touched, many smaller firms will have to shut down. On the upside, prices leap ahead equally fast, so plywood is a roller-coaster industry.

• **No Discipline**—So far, attempts to establish a "more orderly" market for plywood (with one eye out for the Justice Dept.) haven't worked. Said one midsized independent when pressed on this point: "They get together in a meeting and agree on a price, and the first man out of the meeting gets to a telephone to order his office to cut the price \$5, so he can pick up some orders while the others are holding a price umbrella over him."

Their industry, say plywood men, is "immature."

VIII. Coal Industry

In contrast, coal (at least as far as the bigger outfits are concerned) is most mature in its attitude toward prices. The dominating price objective of big producers like Pittsburgh Consolidated,

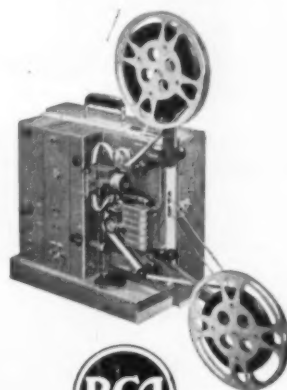
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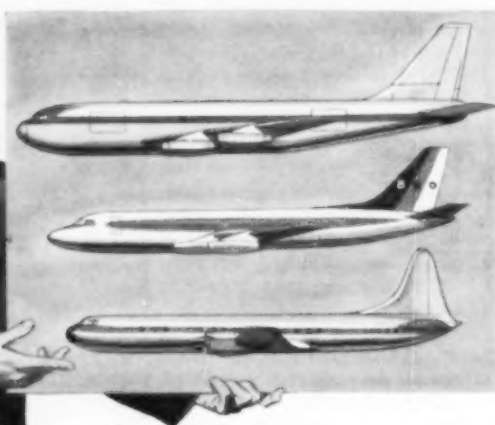
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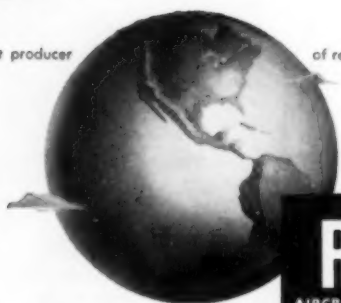


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"... most companies' pricing policies are a complex blend of many such elements ..."

STORY starts on p. 188

Island Creek, Peabody, or Ayrshire is price stability. The economics of coal today are such that companies like these must go after long-term contracts that pre-sell the capacity of a mine before it's even opened.

These so-called "career companies," looking for a steady return over the long life of an investment, seek allies in the electric utility industry, coal's biggest customer. However, some of the most assiduous spot buying of coal is done by some of the most stabilized electric utility systems. The easy and rapid movements of small coal operators into and out of production help to keep the course of coal prices jumpier than the big companies like.

IX. No Generalities

Even very brief accounts of the pricing approaches of industries, such as those above, reveal a pattern across American industry so various as virtually to defy classification. This was the conclusion reached also by a new Brookings Institution study, headed by Dr. A. D. H. Kaplan.

Like the BUSINESS WEEK survey, the Brookings Institution study depends on direct interviewing of executives in a broad range of industries. It will be published in the fall under the title, Pricing Policies and Practices of Large Industries: A Case Study.

Kaplan tried to classify company price policies under broad headings such as standard-cost pricing, price stabilization, price forcing (to develop or expand markets), or de-emphasis of pricing (with stress on quality and services)—the kind of headings he had used in a 1954 study, Big Business in a Competitive Society. He finds these things no longer mean much when you get down to real cases. Most companies' pricing policies are a complex blend of many such elements.

• **New Criteria**—A more meaningful approach, Kaplan thinks, is to classify companies and industries by their influence or control over actual markets. The degree of competition or monopoly in a market can't be shown merely by the number or size of companies in a field.

• **Inflation Controls**—National fiscal and monetary policies must filter through this complicated mixture of company pricing policies and specific market situations before they can affect



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the prices that people actually pay for things in the U.S.

Among economists, serious doubts are growing that broad monetary and fiscal policies for controlling inflation are able to work effectively in this setup.

In the forthcoming issue of Harvard University's Review of Economics & Statistics, Prof. J. K. Galbraith reaches the conclusion that companies in oligopolistic markets—generally the larger and stronger firms—can go far to insulate themselves from the impact of both monetary and fiscal policy.

"Especially in the case of monetary policy," says Galbraith, "the discrimination is profound. Inflation is controlled by denying credit to what are, in a general way, the least powerful firms. At the same time more powerful firms are effectively exempted from the policy."

The big firm's advantage, Galbraith argues, lies in its power to control prices and in degree also its earnings. He holds that on occasion firms in the concentrated sector will be able to raise prices even though a general tightening of demand forces down the prices and return of more competitive firms.

Under these circumstances, Galbraith concludes, "The conviction, or rather the assumption, that these fiscal and monetary controls are effective is vital for the present comfortably uncontroversial state of economic policy." This comfortable notion, he holds, "bars the need to explore new or uncomfortable remedies over which passions might easily be aroused."

• **In a Recession—What will happen** to prices if the U.S. business cycle should turn downward? No one can be sure, of course, but many economists have been adopting the view that prices in general wouldn't decline very much.

"Corporate price-makers and labor leaders alike," says Prof. John P. Lewis of the University of Indiana, former senior staff member of the Council of Economic Advisers, "are deeply afraid of deflationary spirals in which prices and wages start chasing each other down. And many officials in the federal government share this fear."

However, Lewis adds, "both American wages and administered prices are powerfully resistant to declines in demand." In the last two recessions, in 1949 and 1954, the general price level actually rose a trifle.

Economists like Lewis portray America's new pricing system as something far different from the equilibrium that Adam Smith imagined two centuries ago. They suggest that, far from being self-stabilizing, this new price system may work on the ratchet principle. It may run in only one direction—upward—or else stop. **END**

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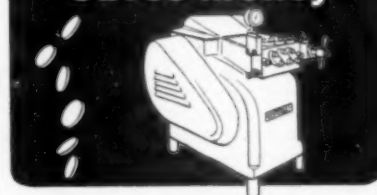
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Why Foreign Aid Makes Sense

Pres. Eisenhower now has a good chance of winning his fight to maintain an adequate foreign aid program. When the Senate Foreign Relations Committee swung its weight last week behind the President, proposing only a small cut in his request, the prospects for Senate approval improved immeasurably. And the mood in the House this week, as Secy. of State Dulles appeared before the Foreign Affairs Committee, seemed to indicate a more moderate attitude on the part of the budget slashers.

It's hard to understand why there has been so much fuss about the new aid program, once the Administration rectified some careless budgeting by the Pentagon and reduced its military aid request enough to bring the total down from \$4.3-billion to \$3.8-billion. The principal changes in the program are straightforward, and probably overdue. The Administration is asking Congress to (1) shift military aid, still the largest part of the program, to the regular defense budget, and (2) put economic aid on a long-term footing, with the bulk of the assistance on a loan rather than a grant basis.

When it comes to the broader question of whether this country really needs to maintain a sizable foreign aid program of some sort—on the order of \$3-billion to \$4-billion a year—there has been no difference of opinion among the many responsible bodies that have examined the question during the past year. Studies made under the auspices of the Administration, the Congress, and business or other private organizations, have all reached much the same conclusion—that foreign aid is an indispensable part of our own military security. And it must be reckoned as vitally important in any broader concept of security that takes account of the American interest in helping the economically undeveloped nations of the world to achieve the economic growth they both desire and need.

The Committee for Economic Development has concentrated on this broader interest in a comprehensive policy statement on "Economic Development Assistance." The CED report, quite rightly, has stressed the economic stake we have in the developing nations. On this score it says: "Economic growth in areas comprising half the globe and where over a billion people live could not fail to enrich world trade and investment opportunities, including our own."

In the discussion on foreign aid, it is sometimes forgotten that this country now does a foreign business of between \$40-billion and \$50-billion a year, counting our exports plus the business done abroad by American companies and their affiliates. It's a safe bet that without the economic support (about \$60-billion) which we have given since World War II to other non-Communist countries our annual

foreign business would not be more than half the present figure—not to mention what the political complexion would be in most of the outside world.

Picking Up the Pieces

Under the U.S. system of government, there's rarely anything to be gained by arguing about the wisdom of a Supreme Court decision. The law is what the court says it is, and, once the ruling comes down, all that anyone can do is accept the decision and start learning how to live with it.

For this reason, there is no point in debating the merits of the court's landmark decision in the anti-trust case against E. I. du Pont de Nemours and General Motors Corp. The court says that du Pont's 23% stock interest in GM—acquired some 40 years ago—violates the Clayton Act. And that's that, as far as the law is concerned.

But the matter doesn't end there—either for du Pont or for the indeterminate number of other great corporations that may find long-standing arrangements compromised by this sudden extension of the Clayton Act to new and unexplored fields.

The question of what happens to du Pont's 63-million shares of GM stock now is up to the lower court for a determination of "the equitable relief necessary and appropriate in the public interest to eliminate the effects of the acquisition offensive to the statute." If this means that du Pont must divest itself of the GM stock, then the court has an obligation to see that the divestment is allowed on terms that are neither damaging to the du Pont stockholders nor unsettling to the economy as a whole. Du Pont has not been found guilty of any wrongdoing—only of exercising extraordinarily good judgment some 40 years ago—and there will be no equity in a heavy-handed divestment order that subjects investors to punishing losses.

By the same token, the Justice Dept. has an obligation to use discretion in applying the new law that the court has made to other cases of intercorporate stock interests. At this point, not even the shrewdest lawyers can foresee all the consequences that may flow from the court's decision. But it is clear that the government antitrusters can do an infinite amount of damage if they seize their new weapons with a whoop and a yell and start hacking away at the fabric of business relationships.

So far, both business and the stock market have taken the decision with equanimity. That is all to the good. But this equanimity is based on the assumption that both the lower courts and the Justice Dept. will use good sense in following up the Supreme Court's decision. It is up to everyone concerned to see that this confidence is not misplaced.

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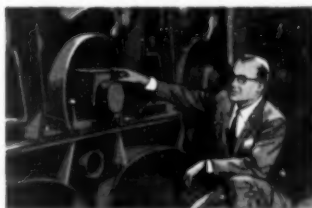
Bearings so hot they caused fires... downtime at the rate of \$125 per hour. These troubles were occurring on Combined Locks' #5 paper machine. Mobil lubrication engineers, working with mill maintenance engineer, studied the problem. When the old-style brass shell bearings were replaced with anti-friction bearings, new lubrication methods were suggested. Result—application time reduced 648 man-hours per month... lubricant consumption cut 600 gallons a year.

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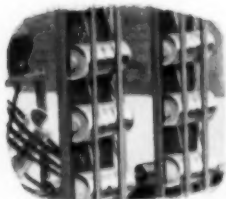
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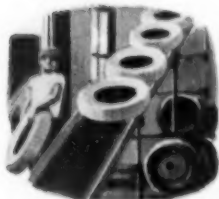
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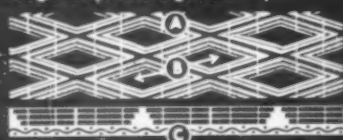
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